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SEDANG GRAMMAR

PHONOLOGICAL AND SYNTACTIC STRUCTURE

by

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The study of Sedang was undertaken in 1963 in the city of Kontum with Péang with whom I traded English lessons for several months. My wife and I spent a year during 1963-4 in DakTo visiting Sedang villages and studying with 'Gim and Lŏ. Back in Kontum at the Linguistic Research Center Tuă and Dih taught me from 1965-7. After a Stateside furlough in 1967-8 and an assignment in the Philippines, I spent six weeks in Kontum in the summer of 1969 transcribing Sedang texts which Hmŏu and Bé had kindly recorded for me. These texts became the basis for the concordance cited below. Later that year I returned to Kontum with my family for six months of Sedang language study with Hmŏu and other Sedang friends. In June 1970 we moved to Nha Trang, accompanied by Hmŏu, to prepare literacy and educational materials in Sedang in cooperation with the Highlander Education Project, under the direction of Dr Ernest W. Lee of the Summer Institute of Linguistics. My three-week participation in a teacher training workshop at the National Montagnard Training Center in Pleiku in February, 1973, was my last contact with the Sedang except for a fried frog-legs supper with Péang in Saigon the following April.

The Linguistic Information Retrieval Project of the Summer Institute of Linguistics and the University of Oklahoma Research Institute gave valuable assistance through the preparation of a concordance of Sedang texts made on the IBM 1410 computer at the University of Oklahoma. This project was sponsored by Grant GS-270 of the National Science Foundation.

The first draft of this Grammar served as a doctoral dissertation for the University of Pennsylvania, 1975. The encouragement and assistance of my dissertation committee has been appreciated: Dr Henry M. Hoenigswald, Dr John Fought, and Dr Dell Hymes. Others who have read and

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I am especially grateful that throughout the years my wife, Marilyn, has been with me to participate in many ways in our Sedang project, sharing with me the realisation that only with in-depth linguistic analyses of Sedang could we obtain the capability to translate adequately the Scriptures for the Sedang - an objective which eluded us.

Throughout life I have sought to follow Jesus Christ, to Whom I give thanks for His direction and encouragement even in this present task.

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September, 1976.

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ABBREVIATIONS FOR PART TWO, SEDANG PHONOLOGY

C	consonant, 4.1
C_i	initial single consonant, 4.1
C_f	final consonant, 4.1
C_m	cluster modifier, 4.1
C_p	presyllable consonant, 4.1
Fr	French, 6.2
G, VG	glided vowel, 4.1
Hr	Hre, 6.1
LR	lax register, 4.3
N	nasalisation, 4.1
PC	Proto-Chamic, 6.2
PNB	Proto-North-Bahnaric, 6.0
R	register, 4.1
Sdg	Sedang, 6.1
Skt	Sanskrit, 6.2
TR	tense register, 4.3
V	simple vowel, 4.1
V_p	presyllable vowel, 4.1
Va	central vowel glide, 4.3

Abbreviations for Part Two, Sedang Phonology *(cont.)*

Ve	front vowel glide, 4.3
VN	Vietnamese, 6.2
Vo	back vowel glide, 4.3

Digraphs and uncommon orthographic symbols:

â	short schwa
e	[ɛ]
ê	[e]
ch	[č]
ng	[ŋ]
nh	[ñ]
o	[ɔ]
ô	[o]
ơ	schwa
s	retroflexed s
v	[w]
x	[s]
ø	no consonant, open syllable
ʔ, ˘, -	glottal stop
˘	(in languages other than Sedang) also short vowel
ˈ	preglottalisation of consonants
ˌ	vowel laryngealisation
ˋ	vowel nasalisation; in non-standard Sedang represents breathy vowels
˜	vowel naso-laryngealisation

ABBREVIATIONS FOR PART THREE, SEDANG SYNTAX

AdvEmp CL	adverbial emphasis clause, 11.1
AdvP	adverbial phrase, 10.3
anN	animate noun, 7.3
an-plM	animate plural marker, 7.3

Abbreviations for Part Three, Sedang Syntax *(cont.)*

apNum	approximate number, 7.2
B CL	bitransitive clause, 9.3
B vb	bitransitive verb, 8.1
B VP	bitransitive verb phrase, 8.1
Ben CL	benefactive clause, 11.2
BenP	benefactive phrase, 11.2
bNP	basic noun phrase, 7.1
C CL	container clause, 9.2
C Vb	container verb, 8.1
C VP	container verb phrase, 8.1
CausConj	causal conjunctive, 13.2
CL	clause, 9.0
Cl	classifier, 7.2
cN	countable noun, 7.2
cNP	count noun phrase, 7.2
Co	complement, 9.7
CoConj	coordinating conjunctive, 12.7
CoEmp CL	complement emphasis clause, 11.1
CompP	comparative phrase, 10.3
CompPt	comparative particle, 10.3
ConcConj	concessive conjunctive, 13.4
CondConj	conditional conjunctive, 13.1
Conj	conjunctive, 13.0
ContConj	contrastive conjunctive, 13.3
Dem	demonstrative, 7.1
DesP	descriptive phrase, 10.3
DName	descriptive name, 7.1
Eq CL	equative clause, 9.7
Eq Vb	equative verb, 8.1
Eq VP	equative verb phrase, 8.1

Abbreviations for Part Three, Sedang Syntax *(cont.)*

Eql CL	zero verb equative clause, 9.7
Eq2 CL	xê *'be'* equative clause, 9.7
Eq3 CL	chiang *'become'* equative clause, 9.7
Eq4 CL	ối *'be'* equative clause, 9.7
eS CL	echo subject clause, 11.2
Ex CL	existive clause, 9.8
Ex Vb	existive verb, 8.1
Ex VP	existive verb phrase, 8.1
Excl	exclamation, 13.8
Foc CL	focus clause, 11.2
FocP	focus phrase, 11.2
FocPt	focus particle, 11.2
fPt	final particle, 10.4
Frag	clause fragment, 12.9
FrusM	frustrative marker, 13.6
gen-plM	general plural marker, 7.3
GName	geographical name, 7.1
I CL	intransitive clause, 9.6
I Vb	intransitive verb, 8.1
I VP	intransitive verb phrase, 8.1
Imp CL	imperative clause, 11.2
IO	indirect object, 9.1
Kin	kinship term, 11.2
Loc	locative, 7.1
LocEmp CL	locative emphasis clause, 11.1
LocP	locative phrase, 10.2
ManP	manner phrase, 10.3
ManPt	manner particle, 10.3
Mult	(number) multiplier, 7.2
N	noun, 7.1

Abbreviations for Part Three, Sedang Syntax *(cont.)*

NomInter	nominal interrogative, 7.1
NP	noun phrase, 7.0
NPH	noun phrase head, 7.1
Num	number, 7.2
NumInter	numeral interrogative, 7.2
O	object, 9.1
OEmp CL	object emphasis clause, 11.1
plM	plural marker, 7.3
plNP	pluralised noun phrase, 7.3
PName	personal name, 7.1
Pred	predicate, 9.1
PRefP	pronoun reference phrase, 7.4
Prep	preposition, 7.5
PrepP	prepositional phrase, 7.5
Pron	pronoun, 7.1
pS CL	postposed subject clause, 11.1
PurP	purposive phrase, 10.3
PurPt	purposive particle, 10.3
pVb	preverb, 8.3
pvAdv	preverbal adverb, 8.5
Q CL	quatative clause, 9.1
Q Vb	quotative verb, 8.1
Q VP	quotative verb phrase, 8.1
Quan	quantitative word, 10.3
Quanf	quantifier, 10.3
QuanfP	quantifier phrase, 10.3
QuanP	quantitative phrase, 10.3
QuanPt	quantitative particle, 10.3
Recip CL	reciprocal clause, 11.2
RecipP	reciprocal phrase, 11.2

Abbreviations for Part Three, Sedang Syntax *(cont.)*

Refl CL	reflexive clause, 11.2
ReflP	reflexive phrase, 11.2
ReflPt	reflexive particle, 11.2
RelPt	relative particle, 7.1
RelrPt	relator particle, 7.5
ResConj	resultant conjunctive, 13.5
Resp	response, 13.9
S	subject, 9.1
S CL	semitransitive clause, 9.4
S Vb	semitransitive verb, 8.1
S VP	semitransitive verb phrase, 8.1
Sim	similitive expression, 10.3
SimP	similitive phrase, 10.3
SimPt	similitive particle, 10.3
sPt	series particle, 12.8
SubTemp	subordinated temporal expression, 10.1
T CL	transitive clause, 9.5
T Vb	transitive verb, 8.1
T VP	transitive verb phrase, 8.1
Temp	temporal (word), 10.1
TempDem	temporal demonstrative, 10.1
TempNP	temporal noun phrase, 10.1
TempP	temporal phrase, 10.1
TempSub	temporal subordinator, 10.1
vAdj	verbal adjective, 7.1
Vb	(main) verb, 8.1
vDes	verbal descriptive, 7.1
Voc	vocative, 13.7
VolP	volitional phrase, 10.3
VolPt	volitional particle, 10.3

Abbreviations for Part Three, Sedang Syntax *(cont.)*

VP	verb phrase, 8.0
Pt	verbal particle, 8.4
w	with
$_{x}$Vb	unstated verb class, 8.0
$_{x}$VP	unstated verb phrase type, 8.0
ø	zero verb, 9.7
(...)	outer brackets in formula: optional occurrence, Introduction
...:(...)	inner brackets in formula: restrictive filler requirement, Introduction
-	separates syntactic elements in phrase and clause formula

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GRAMMAR

THE PHONOLOGICAL AND SYNTACTIC STRUCTURE OF SEDANG

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PART ONE: INTRODUCTION

The Sedang speak a Mon-Khmer language of the North Bahnaric branch and have lived traditionally in central Kontum Province (recently renamed Gia Lai - Cong Tum) in the (South) Vietnam central highlands. Their population has been variously estimated at from 25,000 to 60,000 (NCTXH, 1960) to 80,000 (NNCDT, 1959) (these two references cited by Hickey (1964)).

The Sedang refer to themselves as rơtéang (though the term also has the connotation of the more inclusive "montagnard"); the presyllable rơ- occurs as only s- in some dialects (5.4(a)). The Bahnar equivalent by normal sound change correspondences is hơdang. Devereux (1937,1938) has given their ethnonym as hă(rhn)de:(ng).

A brief survey of their history is given in chapter 1, and chapter 2 presents some details of the Sedang culture. Chapter 3 summarises the erroneous classification of the Sedang as Austronesian and the basis upon which it is classified as North Bahnaric.

1. HISTORICAL AND GEOGRAPHICAL SETTING

The recorded history of the Vietnam area begins with the arrival of high-caste Indians, following in the wake of traders who apparently had been visiting the area for a long time. This Indian colonisation had taken root by the beginning of the Christian era. Nothing is known, of course, of the prehistoric migrations that resulted in the dispersion of people, like the Sedang, throughout the area. The Funan kingdom was probably the most ancient kingdom encountered by the Indians and was located in the general area now occupied by Cambodia. Sanskrit inscriptions in Southeast Asia date from the early centuries of this era. The Chinese had contact with Funan as indicated in their histories. North of Funan was a small kingdom known as Kambuja, accessible to the Indians by an overland route through Siam and Laos. A fine bronze image of

Buddha datable in the 2nd or 3rd century found in the coast of the South China Sea indicates that the Indians had established contact also with the Champa kingdom who were extended along the eastern coast of the peninsula.

The fall of Funan occurred about the middle of the 6th century, due to the growing power of the king of Kambuja. At the beginning of the 7th century the Kambuja kingdom encompassed the whole of Cambodia and Cochin China. Kambuja was then a dominant power in Indochina during the 9th and 10th centuries. The Kambuja king defeated the Chams in a naval engagement in 1181, but the kingdom broke down when the Thais invaded in the 13th century.

In 1371 the Chams attacked Annam (in what is now North Vietnam) and sacked Hanoi, but in a counterattack the Champa (northern) capital of Indrapura was lost to Annam in 1402. During the next century Annam annexed the whole of Champa down to (present-day) PhuYen, but a diminutive Cham state continued in the south for some centuries. A succession of Cham kings was recognised by China until 1543. A Cham court existed in that region until the 18th century when the Annamese took PhanRang.

Except for the Khmers, the recorded ancient history of the area does not deal with the Mon-Khmer peoples of Vietnam. They certainly must have been affected by the warring between Funan and Kambuja, between Kambuja and Champa, and between Champa and the Annamese. Lexical borrowing does attest to their contact with the Champa people, if not also with the Indian colonisers (cf. such borrowings in Sedang, 6.2).

Lexico-statistics show that the four branches of Mon-Khmer found in Vietnam are divergent within the range of 18-32% (Thomas, 1966b; Thomas and Headley, 1970; Smith, 1974a); these are Khmer, Katuic, Vietnamuong, and Bahnaric - Sedang is North Bahnaric (cf. chapter 3). For lack of any other indication or record, glottochronology can indicate a probable point in time when these language branches separated. Taking the lesser cognate relation (or more distant in time) as the more probable point, it can be surmised that Proto-Mon-Khmer split apart about 3800 years ago, or 1800 B.C. ± 500 years at 9/10 confidence level (Gudschinsky, 1956; Gleason, 1955:88). The Bahnaric group has a principal division at 42-51%, separating North and South Bahnaric; or, 2000 years ago, about 0 A.D. ± 300 years. The North Bahnaric languages are separated by a range of 53-74% (see chapter 3), suggesting successive splittings starting about 1400 years ago, or 600 A.D. ± 200 years.

Correlating these dates with the areal history cited above suggests:

(1) Mon-Khmer separated into its major branches in the prehistoric past;

(2) Bahnaric separated into its north and south divisions during the time of the Funan kingdom. Perhaps Funan was a Bahnaric group; unfortunately there is no linguistic information on the Funan people.

(3) The first principal splits within North Bahnaric occurred during the period of warring between Kambuja and Funan.

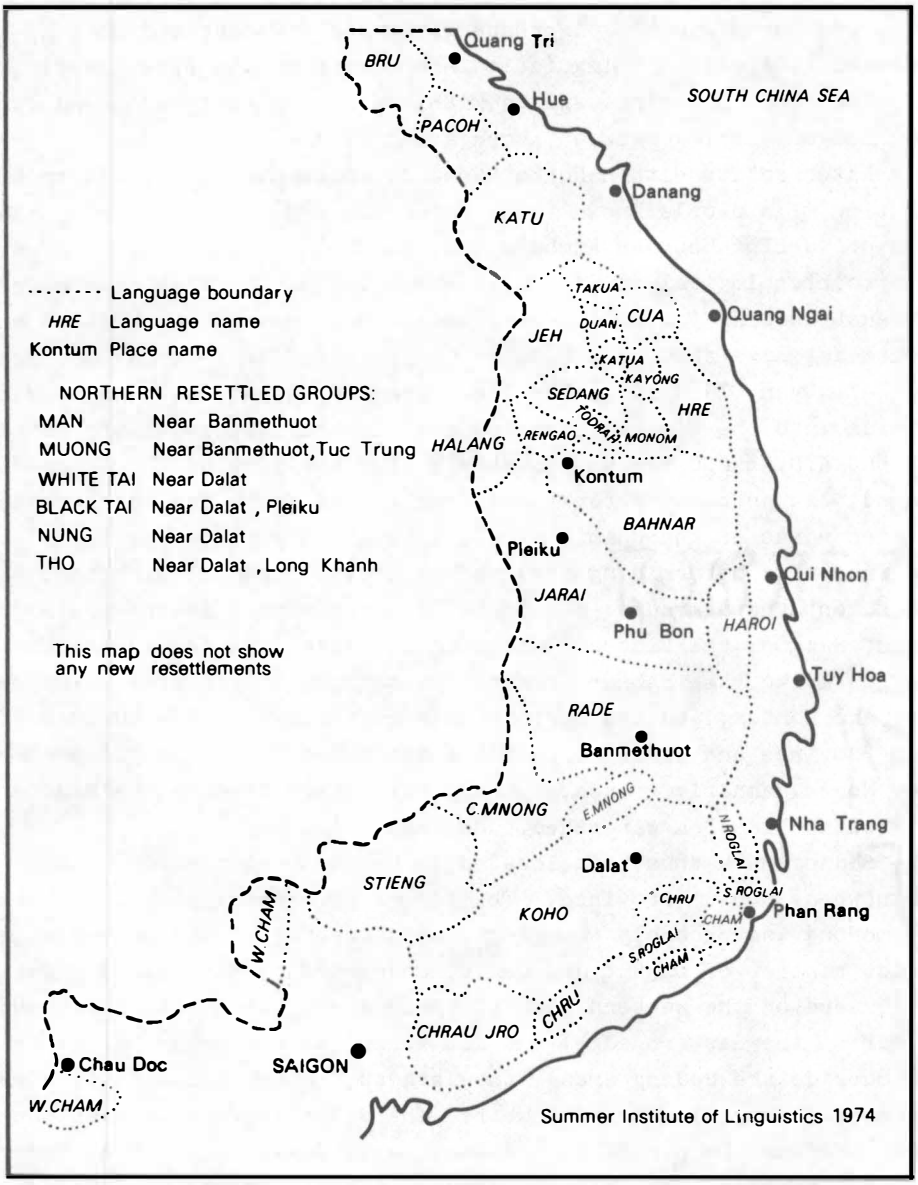
(4) Later splits within North Bahnaric which ultimately led to the separation of a people known today as the Sedang occurred during the period of warring between Kambuja and Champa.

Glottochronological studies also suggest that the Cham people left their Austronesian (or Malayo-Polynesian) cousins and reached the shores of Southeast Asia about 850 B.C. ± 450 years (30-40%: Thomas and Healey, 1962:26-7; Dyen, 1963:19). The Chamic people subsequently split with an incursion into the Vietnam highland area by the Plateau Chamic people about 800 A.D. ± 200 years, probably during the time of the Khmer-Champa wars and also probably after the separation of North and South Bahnaric.

The entrance of the Chamic people into the highlands was the last major factor in determining the general location in the highlands of the Vietnam montagnard groups: the South Bahnaric groups in the south just north of Saigon, the Plateau Chamic groups extending from Banmethuot north to Pleiku, the Bahnar (Central Bahnaric?, cf. chapter 3) between Pleiku and Kontum, and the North Bahnaric language groups throughout Kontum Province and eastward to the coast. The Katuic people are north of the North Bahnaric groups, but separated from them by the Mekong River-South China Sea watershed. See Map 1.1.

The Sedang have thus been located in the central portion of what has been known as Kontum Province. The former government district centre of Toumorong was probably the geographical centre of the Sedang; the district centres of DakSut and DakTo, connected by National Highway No. 14, were on the western edge of their area; the military outpost of Mang Buk on the eastern edge; and Kon Hreng (or Kon Hring, as it is known outside the Sedang area), the largest (though dialectally strange) village of Sedang, in the southwest. The Sedang have thus been bounded (clockwise from the north) by the Jeh, Duan, Cua?, Kơtua, Hrê, Tơdrah, and Rengao peoples. The Bahnar, Jarai (a Chamic group), and Halang peoples have not been very much further away to the southwest. Because of the watershed on the north and eastern sides of the Sedang area, the lines of communication have been with the southwest.

In the west the Poko River flows south and ultimately west into Cambodia at the Yali Falls; in the east the Dak Nge River flows south to the Dak Bla River which encircles Kontum City before flowing into the Poko River. In the south the Tea Oi (or Dak Ui) River flows southwest to the Poko River. The most prominent river for the Sedang,



Map 1.1 ETHNIC MINORITIES OF SOUTH VIETNAM

however, is the Tea Poxái (or Dak Psi) River which winds through the central Sedang area from north of Toumorong to the Kon Hreng area where it flows into the Poko River. See Map 1.2.

The area is generally very mountainous, but the Sedang probably stay below 3000 or 4000 feet elevation (Kontum City has an elevation of 1800 feet). South Vietnam's highest mountain, Ngoc Linh, 8364 feet elevation, known by the Sedang as Ngo Éang, is in the northern Sedang area. It is in an area of tremendous rainfall and is the scene of much Sedang folklore.

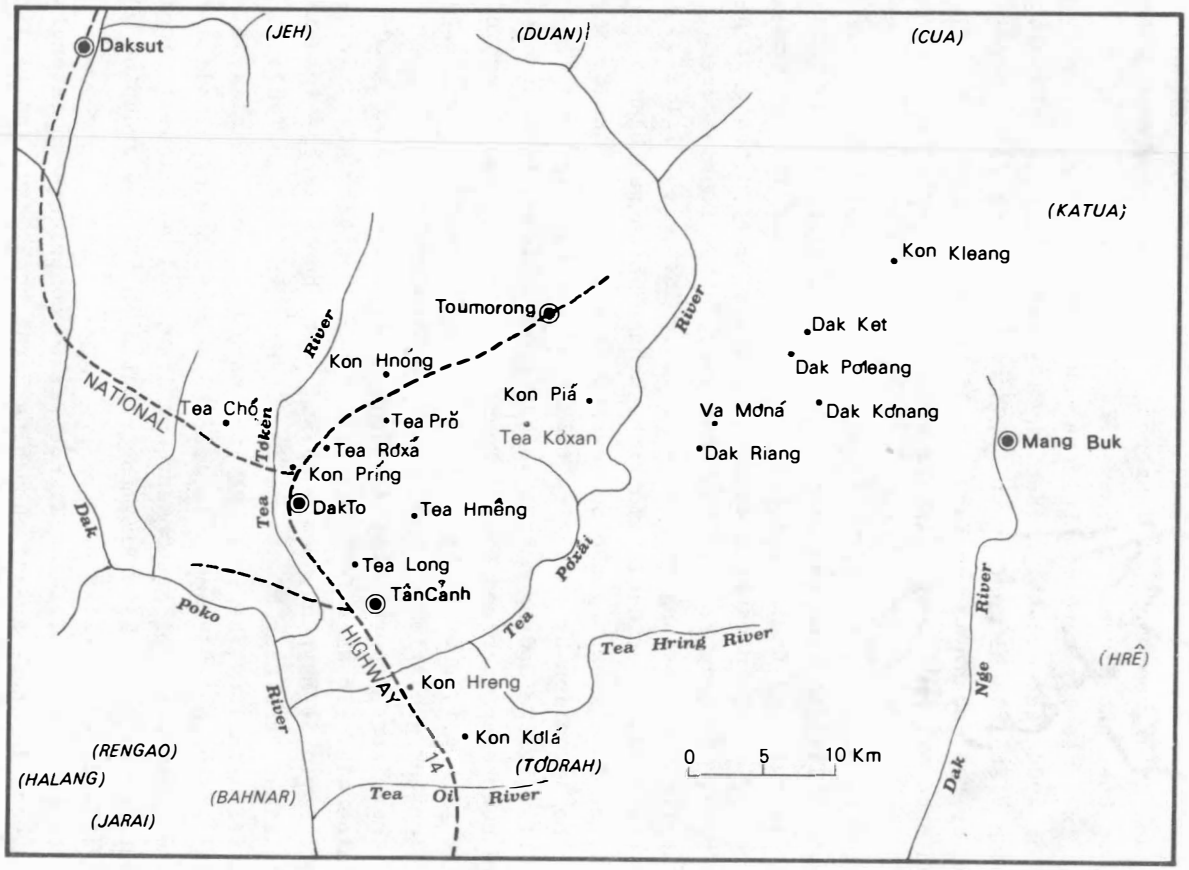
The French Catholic missionaries first entered the Vietnam central highlands about 1843 to flee persecution by the Buddhists in the QuiNhon area. They established their first mission in Kontum in 1849 in the northern area of the Bahnar tribe among whom their mission has concentrated its work. On October 16, 1853, however, Father Dourisboure baptised the first two Sedang catechumen (Guilleminet, 1952/III:1).

In 1862 there was an epidemic among the Bahnar which was blamed on the presence of foreigners by the sorcerers, at which time "the Sedang aggravated the situation by attacking villages" (Hickey, 1967:748). Such activities by the Sedang must have been commonplace, in that the Sedang have been characterised by the French as warriors and makers of arms, utilising the iron deposits in their area. Brenier (1948:76) says that "the fighting qualities of the Sedang are indisputable".

In 1885 there were reports that the Sedang streams contained gold and other minerals. In an effort to exploit the area a Belgian adventurer, Marie David de Mayréna, Comte de Ray, set upon a scheme in which he was proclaimed "the King of the Sedang". Born in 1842 in Toulon, Var, and married in 1869, he later got the name of Baron, Charles de Mayréna, while living in Saigon. In 1888 he entered the highlands armed and with the concurrence of government, military and religious leaders to enter into an alliance with Pim, the reputed chief of a grouping of Bahnar, Jarai and Sedang villages.

The expressed purpose of the alliance was to contribute to extending French influence in those areas, quenching Jarai hostility, and finding a route through the area to Attopeu, Laos. On June 3, 1888, a constitution was signed (Soulié, 1927:82ff.), apparently written in French and Sedang. Article 2 stated that since the Sedang territories were the most extensive in the confederation, it would take the name Royaume Sedang. Article 3 established Mayréna, apparently a man of "striking personality, high courage, boundless self-confidence and marvelous vanity" (Clifford, 1926:854), as Roi des Sedangs.

Succession was to be hereditary or appointive by the King. A blue flag with a white cross and red star was designed. The King was given



Map 1.2 THE SEDANG AREA (only a few villages are indicated)

absolute authority. Human sacrifice was forbidden. Freedom of religion was granted. Subsequently a postal and customs service was created; for pictures of four postage stamps see Marquet (1927, opp. p. 96), each stamp saying "Deh Sedang".

Three decorations were proclaimed ("l'Ordre royal Sedang, celui de Sainte-Marquerite et le Mérite Sedang"); for coloured pictures of the medals see Marquet (1927, opp. p. 88). The shield of the kingdom bore the five words Sedang, Kedra, Deh, Begueur, Marie, i.e. Marie the master who rules the Sedang nation. Mayréna renounced his French citizenship and broke up his marriage. Several Sedang chiefs and their villages have been identified as part of the confederation: Lieu of Kon Hering, Thiam of Kon Keton, Blak of Dak Dry, Brun of Pelu Tebau, and Upico of Kon Trang.

International intrigue apparently entered the scene. In Mayréna's attempts to secure finances and protection for exploitation of the area, he reportedly offered to hand the kingdom over to the Germans. Mayréna took a trip to Europe returning via Singapore. There, in 1890, and under very mysterious and unclear circumstances, he died - and with him so died his Sedang kingdom. (On this entire episode see Clifford (1926), Hickey (1967), Ner (1927), Marquet (1927), and Soulié (1927).)

During the 1930s the Sedang opposed French administration and attacked their outposts (Hickey, 1967:753) and burned bridges along the highway.

The takeover of Vietnam by the Japanese on March 9, 1945, had its effects upon the highlanders. It was said that the Japanese feared only the "moi" (savage) regiments in French uniform, while they were rather contemptuous of the other native regiments (Devereux, 1947:394).

After the French regained control at the end of 1945 the VietMinh were in the highlands and the highlanders fought with both sides. (The Sedang continued to call the VietCong by the term VietMinh.) Many Sedang men can still recall their experiences with the French army. In 1954 Kontum Province came under the control of the government of South Vietnam, although the infiltration of Communist units into the remote areas caused the Sedang people to be divided, forcibly or otherwise. The Sedang have fought on both sides of the Vietnam conflict. During the 1960s the South Vietnam government began moving villages from the distant, isolated, and indefensible areas to locations along the highways.

As the communist offensive gained strength the government concentrated Sedang villages in the areas of DakTo, Tân Cảnh, and Mang Buk. DakTo was briefly overrun in the summer of 1968. In the spring 1972 offensive the communist forces pushed through central Kontum Province until they

were halted outside Kontum City. The tribal people fled before them, though many were cut off before escape. Those caught behind the communist forces were separated from others who became refugees in camps about Kontum and Pleiku cities.

Without immediate prospect of returning to their traditional lands, almost 10,000 of those refugees - Sedang, Jeh, Rengao, Hrê, Haroi, as well as Brũ from the northern parts of South Vietnam - were resettled in Phu Bổn Province and southeast of Banmethuout in areas traditionally belonging to the Jarai and Rade, respectively, both of which are Austronesian groups.

In May, 1974, the fall of Dak Pek, centre of the Jeh north of the Sedang area, forced the government to evacuate Mang Buk where several thousand Sedang had established villages and maintained rice terraces. These Sedang then joined the flood of Sedang refugees around Kontum.

Then in March, 1975, the South Vietnamese government was forced to evacuate the highland provinces altogether and the communist North Vietnamese forces gained complete control of the area. The Sedang were once again divided as some remained in Kontum Province while others fled to the coastal areas which quickly proved to be no refuge. The subsequent movement of the Sedang people following cessation of hostilities in Vietnam is unknown to this writer.

Beside the unfortunate human toll and social dislocation caused by the war, there is the additional linguistic shock of intermingling peoples not only of related languages but also of unrelated linguistic stocks. Thus the next decade may cause the evolution of a further dimension in the linguistic history of such Vietnam montagnards as the Sedang.

(On general history of the Southeast Asian area see Coedès (1966).)

2. CULTURAL SKETCH

This brief sketch of Sedang culture is included only as an orientation to their way of life and is divided into a few topics: livelihood, social organisation, religion, dress, and industry.

Livelihood

The Sedang are farmers, hunters, trappers, and fishers. Their basic crop is rice. They practice slash and burn agriculture in swiddens scattered around the villages, using a given field for two or three years before abandoning it. Twenty or thirty years later they may return to a field, cut down and burn the jungle overgrowth, and plant with

their dibble sticks another crop of rice. In a few areas (e.g. Mang Buk, Kon Hreng) paddy rice is cultivated.

They have a variety of implements like hoes and axes with which they also plant and cultivate corn and manioc in their fields. Within the village they maintain gardens in which they grow tobacco, squash, pepper, potatos, bananas, and other fruits and vegetables. In the surrounding jungles they hunt for deer, boar, wild chickens, tigers, etc.; their crossbows and arrows have been replaced with guns, except that the security situation of recent years has restricted most of their hunting. The men weave and make a variety of bamboo traps for catching small animals, birds, and fish.

The women go out and cut firewood which they carry back to the village in high-piled back baskets. The women have the responsibility of carrying water, caring for the children, weaving cloth, pounding and winnowing rice, and meal preparation.

Rice wine, as well as wine prepared from other foods, is almost always present in large jars tied to the centre post of their houses. Chickens and pigs, cows and water buffalo are kept for sacrifices and food.

Hickey (1967:757) reports that there continues to be instances of slavery among the Sedang.

Social organisation

The largest Sedang social unit is the village. Occasionally villages have banded together to make attack against a mutual enemy, but inter-village political ties are not predominant among the Sedang (Devereux, 1937). A Sedang village will have as few as three houses or, as in Kon Hreng, as many as several hundred. The extended family lives together in a house though each immediate family has its own apartment.

Their kinship system is bilateral and after marriage they practice bilocal residence, i.e. after marriage they will spend a few weeks with one set of parents - either set - and thereafter live permanently with the other. (For Sedang kinship terminology see Smith (1974b).) Marriage is permitted only if at least six generations - counting up and down - separate a boy and girl, i.e. they cannot have the same great-grandparents. Marriage outside the tribe is permitted; warring parties have gone to Bahnar and Jarai areas to secure women for wives. Polygamy has been practiced though forbidden by the Catholic priests.

Respect is given to the elders. Decisions are made by the older men together, meeting in the village communal house which also often serves as the dormitory for bachelor boys. A village chief may be selected to

organise the villagers into group projects like widening paths, repairing fences, etc.

Soulié (1927:69) says that a Sedang boy would not be respected as a man until his first murder.

Religion

The Sedang have been animists, believing in a pantheon of gods, and making sacrifices and offerings to the spirits which surround their lives. Sacrifices are demanded by the shamans in time of death, illness, planting, harvest, etc. Chickens, pigs, and water buffalo are slain at the base of the spirit pole after a night of drinking and dancing. Their expensive Laotian garments are brought out for the dancing, accompanied by the playing of gongs, cymbals, and drums. At death, dancing proceeds from the house to the burying ground outside the village where the casket with the body is buried and a small shelter erected in which are placed various foods and implements for use by the spirit of the deceased.

Devereux (1938) discusses the place of divination and the throwing of dice in their culture.

Human sacrifice was specifically prohibited in the constitution of the Sedang Kingdom of 1888 (Article 8, Soulié, 1927:84), but was reported by Cupet (1893:218) and as recently as 1930 by Devereux (Hickey, 1964:149).

Many Sedang villages, perhaps most of those who fled the communists, are at least nominally Roman Catholic and have forsaken many of the former "heathen" practices.

Dress

The traditional dress of Sedang men has been a loin-cloth, and of Sedang women a skirt. They wrap blankets around themselves in cold weather. Since their participation in the French army, the men have worn pants, shirts, boots, etc., though not necessarily at home in the village. Women have started wearing blouses. Beads around the neck, bracelets on the wrists, or rings through the ear are adornments often seen on women. The women have exquisite skirts and the men robes from Laos which are reserved for special times of sacrifice, dancing, or festivity.

Industry

Early records about the Sedang mention their iron working, a factor which possibly prepared them materially to be warriors in the past.

Another natural resource of their area is cinnamon, though it has not been exploited as much by the Sedang as by the Cua to the northeast.

References

Other descriptions of or references to Sedang culture - none of any significant depth - include the following: Baudesson (1919?:54-5, on marriage); Brenier (1948, a review of Devereux (1947)); Cupet (1893: 216,218, on human sacrifice); Devereux (1937, on social units of tribe, region, village, house, family, and individual); Devereux (1938, on divination and dice throwing); Devereux (1947, on various qualities of the Sedang); Guilleminet (1952, on laws and marriage); Hickey (1964, a general sketch); Hickey (1967:753, on spiritism); Hoffet (1933:24, drawings of Sedang houses); Mansuy (1929:83, on prehistoric studies); Maspero (1929a, a general discussion); Maitre (1912); Smith (1974b, the kinship system).

3. LINGUISTIC AFFILIATION

Those who have classified the languages or peoples of Vietnam have almost always made the distinction between the Chamic and the Mon-Khmer languages (though not always making an Austronesian versus Austroasiatic break). Sedang is the only language in Vietnam that has been classified with both groups by serious scholars. The early Chamic and Mon-Khmer classifications as discussed below were unscientific or speculative. The structural classification of Sedang as Mon-Khmer and, more specifically, North Bahnaric, was made by careful lexicostatistics and phonological reconstructions in the 1960s.

The Chamic connection

Schmidt (1906:18), in *Die Mon-Khmer-Völker*, constructed a superfamily composed of Austronesian and Austroasiatic languages. The latter was divided into seven subgroups. The first group was a "Mixed group" including Cham, Rade, Jarai, and Sedang. The second group was a "Mon-Khmer group" including Mon, Khmer, Bahnar, and Stieng. The stated basis of the mixed group was that those languages were Mon-Khmer in construction and word-building, but have appropriated a considerable number of Malayan loan words, including the personal pronouns and numerals. In evaluating this group Thomas (1964b:152) correctly asserts that this group is "fanciful" in that Cham, Rade, and Jarai are indisputably Austronesian and Sedang is clearly related to Bahnar. Schmidt's reviewers, Ray (1907) and Finot (1907), as well as the French translation

of his book (Schmidt, 1907), repeated the same classification. Przyluski (1924:390) was under Schmidt's influence as he said that the Mon-Khmer family had three civilised languages to attest to its antiquity: Mon, Khmer, and Cham. He then classified the Mon-Khmer languages "geographically" and established a central group with Khmer, Bahnar, Stieng, and Rengao, and an eastern group with Cham, Jarai, Rade, and Sedang which shared a Malayan influence. Schmidt (1926:138,140) retained the same mixed group of Cham, Rade, Roglai, Jarai, and Sedang. Marquet (1927:74) says that the "Moi" - Sedang, Jarai, Rengao, Rade - are undoubtedly of Malayo-Polynesian origin. Kieckers (1931:114) repeats Schmidt's grouping, placing Sedang in a Cham language group of Austroasiatic. Sebeok (1942:206) attempts to summarise the grouping of languages but retains Sedang within a Cham group of Mon-Khmer languages. And as recently as 1952 Faublee (1952:652), though not confusing Austroasiatic with Austronesian languages, nevertheless included Sedang with Cham as part of the Indonesian group of Malayo-Polynesian languages. And Reynaud (1962) attempted to form sound laws within Bahnar, Jarai, and Sedang, as well as between them and Vietnamese.

Mon-Khmer conjecture

Writing at the same time that Schmidt was preparing his earliest work, Cabaton (1905:271-2), on the basis of many word lists, realised the necessity to establish three families of languages: (1) those with Malayo-Polynesian resemblances (including Cham), (2) those like Khmer (including Stieng, Chrau), less like Khmer (Bahnar, Sedang, Halang), and somewhere between this group and the following group (Khmu?, Lamet); and (3) those like Tibeto-Burman and Tai. Sedang, it is noted, is here correctly classified with Bahnar and Halang.

Correct classification has sometimes been mixed with untechnical jargon, as when Mayréna, the King of the Sedang, is quoted (Soulié, 1927: 26) as saying that Cham and Jarai were similar but "quant aux dialectes Bahnar et Sedang, ils ne sont pas trés différents de l'annamite vulgaire. D'ailleurs, auprès de ces tribus, j'aurai pour interprètes les Pères de la Mission des Bahnars."

Maspero (1929b:64-5) subdivides the Mon-Khmer family without specific criteria into many groups, including a Bahnar group (Rengao, Jalung, Galar, Halong) and a Sedang group (Dadrah, Halang, Rengao, Kamrang). Devereux (1937:1;1938:125) only classified Sedang as a "typical Mon-Khmer Moi tribe". Brenier (1948:75), reviewing Devereux's 1947 article, speaks of "the Bahnar (a branch of the Sedang)"!

Pinnow (1959:3) has a classification similar to Maspero with Mon-Khmer subdivided into many groups including a Bahnar group (Bahnar, Rengao,

Jalung, Halong, etc.) and a Sedang group (Sedang, Dadrah, Halang, Rengao, etc.). The German language atlas (Salzner, 1960:4) subdivides Austroasiatic into a west group (Khasi, Nicobarese, etc.), east group (Mon, Khmer, "Moi"), a Chamic group, and Yumbri. Sedang is classified with the Moi of the east group on a par with Bahnar. Bahnar subsumes Rengao, Jelung, Halong, etc., and Sedang subsumes Dadrah, Halang, Rengao, Duan, Hrê, etc.

Coedès (1962;1966:33), the venerated Southeast Asian historian, discussing differences in language and kinship relations, notes that the Cham and related tribes speak languages belonging to the Indonesian family and have a matriarchal system, whereas there is another group, consisting of the Bahnar, Sedang, Mnong, and other tribes whose languages belong to the Mon-Khmer group and whose family is usually patriarchal.

Voegelin and Voegelin (1966:28) repeat a classification similar to that of Maspero and Pinnow.

Structural classification

On the basis of a lexico-statistical study Thomas (1966) clearly distinguished the Katuic (Katu, Pacŏh, Brũ) and Bahnaric branches of Mon-Khmer in Vietnam. Cognate percentages also enabled a further distinction to be made between the North (Cua, Hrê, Sedang, Bahnar, Mơnâm, Jeh) and South (Chrau, Kơho, Mnong, Stieng) Bahnaric language groups. This study was expanded by Thomas and Headley (1970) to include a Pearic branch and to present an outline of the general Mon-Khmer framework. Sedang continued to be correctly classified as North Bahnaric.

The present writer has confirmed these divisions (Smith, 1974a) utilising a computer program that compared 281-item word lists from 32 languages and dialects of Vietnam with every other list and structured the languages into a language tree relationship on the basis of cognate percentages. Figure 3.1 shows a language tree of Vietnam languages derived from these comparisons in which Sedang is clearly shown to be North Bahnaric, indisputably separate from the Austronesian languages. Chart 3.1 shows the cognate percentage distance of the other 31 languages from Sedang using the 281-item word list and three subsets of the list.

Lexico-statistical studies are perforce a first approximation of genetic language relationships while the science awaits phonemic analyses of languages which permit structural studies and phonological reconstructions. Linguistics in Vietnam has recently arrived at this stage.

Thomas and M. Smith (1967) made the first phonological reconstruction, showing the clear relation between Jeh and Halang and positing Proto-Jeh-Halang. Smith (1972) then included Proto-Jeh-Halang with Bahnar, Hrê, and Sedang to reconstruct Proto-North-Bahnaric (cf.

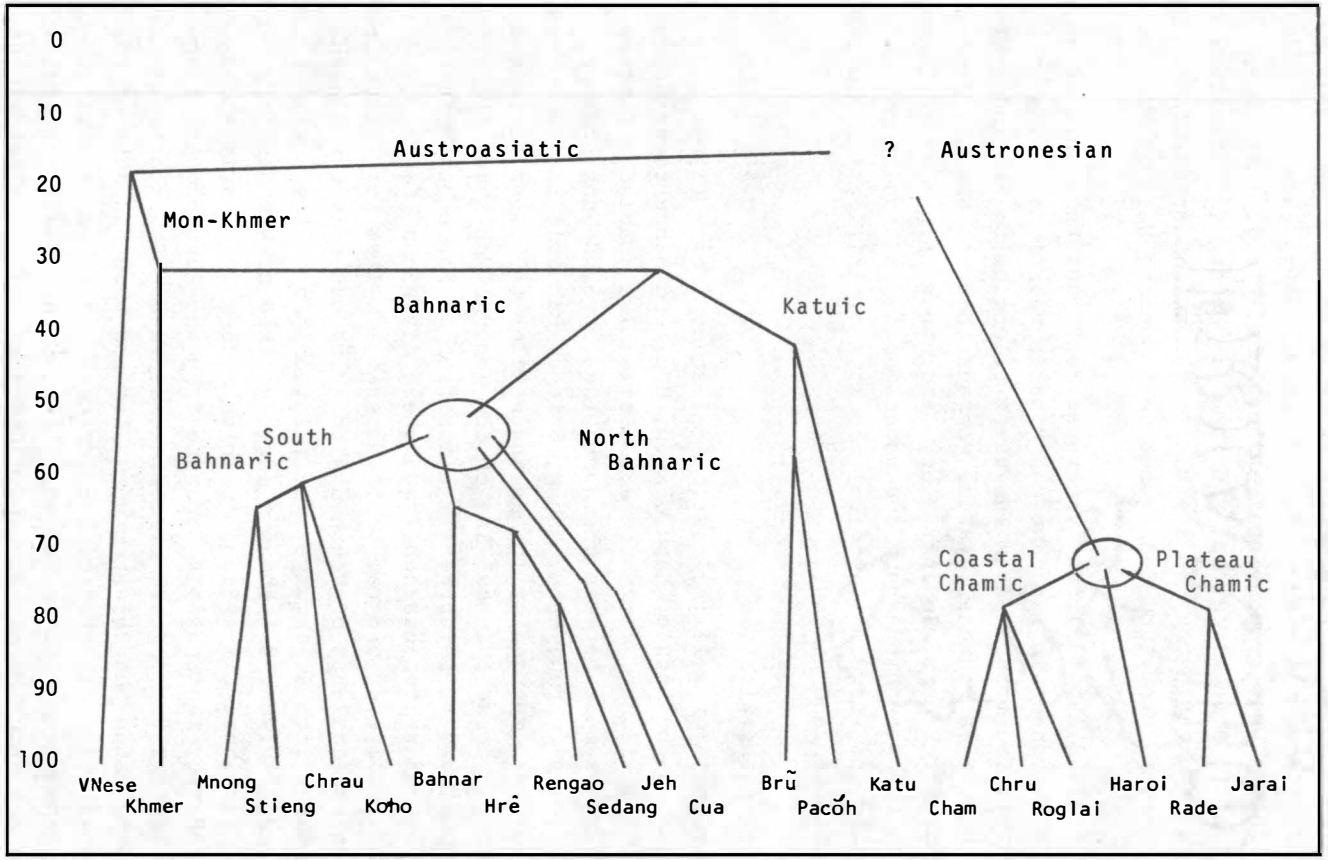


Figure 3.1 Language tree of Vietnam languages derived from 281-word list cognate percentage comparisons (adapted from Smith, 1974a) (circles indicate indistinct separations)

	212-word list	100-word list	281-word list	200-word list	difference	Thomas (1966)
Greater Sedang	95	97	94	96	3	
Todrah	90	88	-	85	5	
Rengao	80	74	74	71	9	
Hrê BaTơ	72	76	66	68	10	
Hrê SơnHà	71	75	66	67	9	
Bahnar Kontum	67	64	62	59	8	
Bahnar Pleiku	65	63	59	57	8	
Jeh	67	58	60	56	11	
Cua	54	52	50	48	6	
Chrau Jro	49	47	44	39	10	44
Chrau Prang	49	47	44	39	10	
Mnong Rơlâm	49	46	44	39	10	46
Stieng	49	43	44	39	10	44
Kơho Chil	49	40	44	39	10	
Kơho Lach	48	38	44	39	9	
Mnong Central	50	42	43	38	12	
Kơho Srê	47	39	42	36	11	39
Brũ	31	33	30	28	5	31
High Katu	28	33	26	22	6	33
Low Katu	27	31	24	21	6	31
Vietnamese	26	30	24	26	10	
Pacôh	26	29	25	24	5	27
Khmer	27	23	25	24	4	
Jơrai	21	19	19	19	2	
Rade	19	16	18	16	3	
Hơroi	18	16	17	16	2	
Chru	17	19	16	16	3	
N. Rơglai	17	18	16	15	3	
W. Cham	16	17	16	16	2	
E. Cham	15	17	15	14	3	
S. Rơglai	15	16	14	13	3	

Chart 3.1 Cognate percentage of Sedang with 31 other Vietnam languages and dialects (the 212-, 100-, and 200-word lists are subsets of the 281-word list, the 100- and 200-word lists being the Swadesh word lists; the maximum difference between these figures for each language is indicated and the Thomas (1966) percentage if available; taken from Smith (1974a))

chapter 6). In this reconstruction Sedang was shown to be most closely related - on a phonological basis - to Hrê, both being descendants of Proto-Hrê-Sedang. Similar studies have also been made of the South Bahnaric languages (Blood, 1968; Phillips, 1971 - which also duplicated the North Bahnaric work and reconstructed Proto-Bahnaric) and Katuic languages (Dorothy Thomas, 1967).

Despite the lexico-statistical classification of Bahnar with the North Bahnaric languages, both North Bahnaric phonological studies cited above suggested rather a South Bahnaric classification of Bahnar, explaining the northern geographical location of the Bahnar as a result of migration away from the South Bahnaric languages caused by the highland incursion of the Plateau Chamic language groups. Subsequently Gregerson, Smith, and Thomas (1976) have proposed that Bahnaric, with Alak, may be from another Bahnaric branch - Central Bahnaric. Thus, the most recent view concerning the structural, genetic relationship of the Bahnaric languages is as follows:

BAHNARIC LANGUAGES

1. *North Bahnaric*
   Sedang, Rengao, Halang, Jeh, Mơnâm, Kayong, Hrê, Todrah
2. *Central Bahnaric*
   Bahnar, Alak
3. *East Bahnaric*
   Cua, Kơtua
4. *South Bahnaric*
   Stieng, Mnong, Kơho, Chrau
5. *West Bahnaric*
   Loven, Nyaheun, Oi, Brao, etc.

PART TWO: SEDANG PHONOLOGY

INTRODUCTION TO PART TWO

The three chapters of Part Two present a detailed phonological statement of a given subdialect of Sedang and a discussion of both synchronic and diachronic aspects of Sedang phonology. Chaper 4 presents a single complete (synchronic) phonological system of Sedang representing the dialect known as rɔtéang kɔklai *'Sedang that uses* kɔklai *"what"'*, which is a principal and central (ethno-) dialect. More particularly, a subdialect of rɔtéang kɔklai has been chosen in which the denasolaryngealisation phenomenon (5.6) does not occur. This subdialect is most readily intelligible both orally and in written form to the broadest scope of Sedang speakers. This dialect is spoken in villages such as Tea Kɔlap, Dak Rɔwang and Va Mɔná.

In Sedang phonology there is unusual dynamism of both synchronic and diachronic dimensions. Many stages of the historical development of Sedang phonology are still apparent in Sedang dialects. The Sedang frequently say, Rem pɔlê tɔpui ti ê *'Every village speaks differently'*. Thus certain synchronic variations of Sedang phonology are presented in chapter 5.

Furthermore, Sedang phonology differs significantly from that of neighbouring languages. Widespread mergers have left holes in the phonological pattern which are currently being filled by new loans. This diachronic aspect is discussed in chapter 6.

In applied linguistics (e.g. preparation of literacy materials) the writer has found that phonological statements of the phonemes of a language are frequently inadequate; they need to be supplemented by statistical studies of the frequency of occurrence of each phoneme in both dictionary lists and sample texts as well as by detailed distributional statements (as outlined in, for example, Gudschinsky (1973)). The present phonological statement emphasises both the distribution and the frequency of each phoneme.

The frequency of phonemes in text, as cited in chapter 4 as "text count", indicates the number of occurrences of a given phoneme in a 27,437-word corpus of Sedang texts for which a concordance had been prepared (see Acknowledgements) and the phonemes subsequently counted by a computer program (cf. Smith, 1974e).

The frequency of phonemes in a dictionary listing, cited as "dictionary count", was determined two ways. For presyllables and main syllable initial consonants and consonant clusters, the writer's approximately 5000-word manuscript Sedang-English dictionary was used and the phonemes counted manually; for elements of the vowel plus final-consonant clusters (because of the unavailability of the writer's larger rhyming dictionary of Sedang words which would have facilitated such counts) a tabulation of the 1409 different words which occur in the aforementioned 27,437-word corpus of texts was substituted as a dictionary and the phonemes counted in the computer program referenced above.

The Sedang practical and basically phonemic orthography is used throughout with phonetic detail given for each non-standard symbol where it is introduced. (See also List of Abbreviations for Part II.)

Sedang phonology was described in Smith (1968), but that of chapter 4 is completely rewritten and expanded. Sedang dialectology of chapter 5 is a summary of that presented in Smith (1967b,1969b,1973a,b); and the historical description of Sedang phonological development is a summary from the Sedang point of view of material presented in Smith (1972) and Gregerson and Smith (1973).

4. A SEDANG PHONOLOGICAL SYSTEM

4.0 *INTRODUCTION*

The Sedang mono- and bisyllabic phonological words are defined in 4.1. Subsequent sections discuss the various parts of the phonological word: initial consonant position (4.2), vowel plus final-consonant cluster (4.3) and presyllables (4.4).

Phonological word reduplication is discussed in 4.5, and alphabetisation in 4.6.

4.1 *PHONOLOGICAL WORDS*

Phonological words in Sedang are either mono- or bisyllabic. Monosyllabic words consist of one (usually) stressed "main syllable". Bisyllabic words consist of a preliminary unstressed "presyllable" and a (following) stressed main syllable.

Bisyllabic words functionally are generally found among the open classes of words - nouns, descriptive names, verbal adjectives and main verbs, although bisyllabic words are also found in closed classes - pronouns (but not the personal pronouns), numbers, classifiers, temporals (see Part Three).

Monosyllabic words functionally are found in all word classes, but some word classes are almost exclusively composed of monosyllabic words. The only open class of words which is predominantly monosyllabic is personal names (7.1). The closed classes of words which are predominantly monosyllabic include personal pronouns, demonstratives, plural markers, prepositions (except kɔdam, pɔpêng), preverbs (except mɔ-éam, pɔxiam), verbal particles, preverbal adverbs (except hɔnun), equative verbs, the existive verb, the many particles of clause peripheral phrases, final particles (except 'di'do), exclamations, responses (except ô-ôh), series particles, and clause conjunctives (except tɔma). Monosyllabic function words if spoken (unnaturally) in isolation are stressed; many in context are unstressed.

A dictionary count shows that 60% (2854/4768) of Sedang words are monosyllabic whereas in text 91% (25,038/27,437) are monosyllabic. Thus bisyllabic words play the lesser role in both instances (40%, 9%, respectively).

Affixation is restricted to monosyllabic roots forming bisyllabic derivatives. One trisyllabic derivative has been encountered, however, with the adversative affix lɔ- (lɔkɔdê *'(adversity of) kill'*) raising the question of analysing lɔ- as a particle rather than as an affix (12.3).

The main syllable consists of an initial consonant position (4.2) filled by an initial single consonant (C_i) with or without a preceding and/or following consonant cluster modifier (C_m) followed by a register-identified (R) vowel plus final-consonant cluster (4.3) filled by a simple (V) or glided (VG) vowel (with optional nasalisation (N)) and final consonant (C_f).

Presyllables (4.4) consist of a presyllable consonant (C_p) and presyllable vowel (V_p).

A phonological word may thus be summarised:

presyllable main syllable

Word: $\overbrace{(C_pV_p)}\ \overbrace{(C_m)C_i(C_m)V(G)(N)(C_f)R}$

initial consonant position

register identified vowel plus final-consonant cluster

A minimal phonological word:

C_iVR	á *'I'*

A maximal phonological word:

$C_pV_pC_iC_mVGC_fR$	tɔ́kl̀oam	*'to run into each other'*
$C_pV_pC_mC_iVNC_fR$	hɔ'r̀ak	*'bloody'*
$C_pV_pC_mC_iC_mVC_fR$	kɔ'blin	*'to be very full'*

4.2 *INITIAL CONSONANT POSITION*

The initial consonant position of the main syllable may be filled by either an initial consonant or initial consonant cluster.

The dictionary count shows that 69% (1960/2854) of all monosyllabic words have a single consonant - in opposition to a consonant cluster, and 78% (1498/1914) of all bisyllabic words have a single consonant. Or, among all words 73% (3458/4768) have single consonants whereas in text 86% (23,454/27,437) of all words have a single consonant. Thus consonant clusters play the lesser role. Consonant clusters occur more frequently in monosyllabic than bisyllabic words (31% versus 22%), but only one word in seven in text has a consonant cluster.

See 4.4 for cooccurrence restrictions of presyllables and following initial consonant. See 4.3 below for cooccurrence restrictions of nasalised vowels and preceding initial consonant. There is no other observable cooccurrence restriction of initial consonant with following vowel, vowel glide, final consonant, or register identification.

Initial single consonants

The initial single consonants are presented in Chart 4.1. The four basic articulatory positions are bilabial, alveolar, alveopalatal, and velar.

There is a series of five voiceless stops including glottal stop. Before (otherwise) initial vowels glottal stop is unwritten in monosyllabic words and is written with a hyphen in bisyllabic words. The digraph ch represents [č].

		Bilabial	Alveolar	Alveo-palatal	Velar	Glottal
Stop	vl	p	t	ch	k	ʔ
	vd	b	d	j	g	
	nasal	m	n	nh	ng	
Continuant	vl		x s			h
	vd	v	l r	y		

Chart 4.1 Initial single consonants, C_i

There is a series of four prenasalised voiced stops [mb, nd, ñj, ŋg].

There is a series of four nasals. The digraphs nh and ng represent [ñ, ŋ].

x is a voiceless alveolar grooved fricative [s]; s is a voiceless retroflexed alveolar fricative [ʂ] which in some (older, toothless?) speakers occurs as a whistle. (In Smith (1968) the retroflexed fricative was analysed as a consonant cluster xr for reasons of economy; that analysis is here abandoned for psycholinguistic reasons - educated Sedang completely rejected its orthographic implications); h is a voiceless glottal fricative though it assimilates to the shape of the following vowel.

Chart 4.2 shows the frequency of the single consonants in both the dictionary and text count. Four voiceless stops account for 38% of all words in the dictionary - a result of specific historical sound mergers (6.1). As a group the four voiced stops occur infrequently in the dictionary (10%) in that they are not reflexes from Proto-North-Bahnaric. The least frequent consonant, y, is currently entering the language through loans from Bahnar, Vietnamese and French.

Contrary to all other initial consonants, n, l, d, b, and j occur more frequently in (the less frequent) bisyllabic words than in monosyllabic words. n has a high proportion of cooccurrence with presyllables hσ- and kσ-; l with kσ- and pσ-; d with mσ-, tσ-, kσ-, hσ- and rσ-; b with hσ-, kσ-, rσ-, and tσ-; and j with hσ- and tσ-.

The ranking of these consonants by text frequency differs from the dictionary count under the influence of high frequency function words. The ranking of consonants by text frequency is, in part, cited in Chart 4.3 with 18 highly influential function words with their rank (among all words in the text) and text frequency. Minus the effect of their occurrence in the listed function words, the text frequency of the single consonants begins to correspond more to their dictionary count

	DICTIONARY COUNT				TEXT COUNT	
	Monosyl.	*Bisyl.*	*All words*			
	No.	No.	No.	%	No.	%
t	256	165	421	12	2982	12
p	222	109	331	10	1825	8
ch	197	88	285	8	1126	5
k	158	103	261	8	2868	12
x	165	95	260	7	787	3
n	62	171	233	7	703	3
l	53	160	213	6	1161	5
h	145	57	202	6	1149	5
m	121	76	197	6	2442	10
r	113	83	196	6	279	1
?	119	69	188	5	4139	18
d	56	86	142	4	560	2
b	34	65	99	3	145	1
ng	53	44	97	3	563	2
v	55	34	89	3	1014	4
j	37	42	79	2	154	1
nh	35	26	61	2	94	0
s	50	9	59	2	68	0
g	19	15	34	1	1375	6
y	10	1	11	0	20	0
TOTAL	1960	1498	3458	101	23454	98

Chart 4.2 Dictionary and text frequencies of initial single consonants

frequency. Note, for example, the infrequent occurrence of g in text apart from the pronoun gá.

pa *'father'*
ta *'to place within'*
cha *'body; to get; to be able'*
ka *'to eat'*
a *'to, toward'*

ba *'to shine'*
da *'to hold for pouring into; to pull latch'*
ja *'grandmother; to lead, take'*
ga *'dawn'*

Cons. rank	Cons.	Function word	Function	Word rank	Word freq.	Cons. freq. in funct. words	Cons. freq. in other words
1	?	á	Pron *'I'*	3	684		
		ôh	Neg. Pt	7	478		
		a	Prep. *'to'*	14	329		
		eh	Pron. *'you'*	15	306		
		ái	pVb, T & Ex Vb	16	290		
		ah	future Pt	17	285		
		u	pVb, PurPt	19	277	2649	1490
2	t	ti	Neg.Pt, ManPt	6	521		
		ta	Neg.Pt	10	355	876	2106
3	k	kố	Dem.	4	593		
		ki	RelPt	8	404		
		kô	RelrPt	21	233	1230	1638
4	m	me	Dem *'that'*	1	1707	1707	735
5	p	pin	Pron *'we'*	18	284	284	1541
6	g	gá	Pron *'he,...'*	2	1334	1334	41
7	l	-	-	-	0	0	1161
8	h	hiáng	vPt *'already'*	9	376	376	773
9	ch	-	-	-	0	0	1126
10	v	vai	Pron *'they'*	5	558		
		va	pVb,C Vb *'want'*	12	333	891	123

Chart 4.3 Initial single consonant frequency in the 18 most frequent function words

ma *'eye; brass; wrist, ankle'*
na *'sister; fish net; time'*
nha *'grass'*
nga *'top edge of container'*

xa *'to weave; to cut meat'*
sa *'mother-in-law'*
ha *'crowded'*

va *'to want'*
la *'to dip in water; (of sun) to set'*
ra *'certainly; to ambush'*
ya cha *'house lizard'*

Initial consonant clusters

There are five types of simple consonant clusters with cluster modifier (C_m) either before or after the cluster centre. The cluster centre is a simple initial consonant (as defined above) though not all simple consonants function as a cluster centre. There are two consonant cluster types with the cluster modifier before the cluster centre:

(1) h-, voicelessness, for voiceless nasals and orals: hm, hn, hnh, hng, hv, hl, hr, hy.

(2) '- (apostrophe), glottal, for preglottalised voiced stops, nasals, and orals: 'b, 'd, 'm, 'n, 'nh, 'ng, 'v, 'l, 'r. 'g does not occur and 'j questionably once (except in personal names (Smith 1969c: 190)) consistent with Southeast Asian areal phonology. 'y does not occur because y as a recent phoneme in Sedang has not developed this cluster yet. Another Sedang researcher, Wanda Jennings, reports (in personal correspondence) a series of preglottalised voiceless stops ('p, 't, 'ch, 'k) in some words here analysed as having voiceless stops.

There are three consonant cluster types with the cluster modifier after the cluster centres:

(3) -h, aspiration, for the aspirated consonants: ph, th, kh (a very small proportion of Sedang speakers claim to distinguish ch and chh).

(4) -l: pl, tl (perhaps only a dialectal variant of kl), kl, bl, gl, ml.

(5) -r: pr, tr, kr, br, dr, gr, mr, ngr.

Complex consonant clusters have a cluster modifier both before and after the cluster centre. The following have been observed: 'br, 'dr, 'mr, 'ngr, 'bl, hngr (only in two personal names).

The above consonant clusters are shown in Chart 4.4. Most cluster centres are members of two or three different consonant clusters; m and b each belong to five, ng to four, and y only to one. Single consonants which do not occur as cluster centres are ch, j, x, s, h, and ' (glottal stop).

The dictionary and text frequencies of the consonant clusters is given in Chart 4.5. dr has an unusually high occurrence in bisyllabic words, especially with presyllables hơ- and kơ-. pr has a higher text

frequency than dictionary frequency because of the high text occurrence of the pronoun prə́i *'those two'* and container verb ɒro *'to do'*; kh because of the quotative verb khə́n *'to say'*; 'n because of the container verb 'nai *'to know'*; and hl because of the container verb hlo *'to see'*.

Cluster modifier:	-h	-l	-r	h-	'-	'-r	'-l
Cluster centre:							
p	ph	pl	pr				
t	th	(tl)	tr				
k	kh	kl	kr				
b		bl	br		'b	'br	'bl
d			dr		'd	'dr	
g		gl	gr			'gr	
m		ml	mr	hm	'm	'mr	
n				hn	'n		
nh				hnh	'nh		
ng			ngr	hng	'ng	'ngr	
v				hv	'v		
l				hl	'l		
r				hr	'r		
y				hy			

Chart 4.4 Consonant clusters, $(C_m)C_i(C_m)$

Chart 4.6 indicates the frequency of cluster centres, subsuming together all consonant clusters of which they are a part. Chart 4.7 indicates the frequency of cluster modifiers, subsuming together all consonant clusters of which they are a part.

	DICTIONARY COUNT				TEXT COUNT	
	Monosyl.	*Bisyl.*	*All words*			
	No.	No.	No.	%	No.	%
dr	39	116	115	12	514	13
tr	72	31	103	8	361	9
kl	73	28	101	8	397	10
kr	75	26	101	8	149	4
pr	84	5	89	7	420	11
pl	58	12	70	5	68	2
kh	55	9	64	5	328	8
'n	31	23	54	4	396	10
hr	44	10	54	4	121	3
hn	35	15	50	4	73	2
hl	34	10	44	3	343	9
hm	37	7	44	3	128	3
ph	40	2	42	3	41	1
'b	27	12	39	3	173	4
24 others	190	110	300	23	471	12
TOTAL	894	416	1310	100	3983	101

Chart 4.5 Dictionary and text frequencies of consonant clusters

	DICT. COUNT		TEXT COUNT	
	No.	%	No.	%
k	266	20	874	22
p	201	15	529	13
d	180	14	545	14
t	129	10	469	12
b	107	8	259	7
n	104	8	469	12
m	93	7	169	4
l	69	5	371	9
r	68	5	143	4
nh	40	3	23	1
v	21	2	23	1
g	16	1	9	0
ng	13	1	97	2
y	3	0	3	0
TOTAL	1310	99	3983	101

Chart 4.6 Dictionary and text frequencies of cluster centres

	DICT. COUNT		TEXT COUNT	
	No.	%	No.	%
-r	503	39	1479	37
h-	229	18	796	20
'-	219	17	703	18
-l	214	16	507	13
-h	129	10	460	12
'-l	11	1	35	1
'-r	5	0	3	0
TOTAL	1310	101	3983	101

Chart 4.7 Dictionary and text frequencies of cluster modifiers

phá *'different'*
tha *'to hurry'*
kha *'to block - as a road block'*

pla *'to mediate; flame'*
tlua *'white'*
klá *'tiger'*
bla *'to push over'*
glá gláng *'to fly hither and yon - as of leaves'*
mlói *'fireworks'*

pra *'sacrifice harness'*
tra *'to shine; to strip leaves of plant'*
kra *'old'*
bro *'to prepare'*
drá *'shelf'*
gram *'to run into a stick on a trail'*
mrá *'wicked'*
tɔngroh *'tall, elderly sick person'*

hma *'to be acquainted with'*
hna *'to bud'*
hnha *'(of butterfly wings) to lie down'*
hngám *'heavy'*
hva *'to chip'*
hla *'dead'*
hra *'clean; to lack'*
hyó *'to scrutinise'*

'ba *'never, at long last'*; 'ba tɔnén *'shooting range'*
'dó *'classifier for bamboo; small boat'*
'jó *'a narrow but tall pile'*
'mo *'to hug'*
'na *'(series particle)'*
'nham *'to soak up water'*
'ngei *'up high'*
'vè *'bowtrap arms'*
'lau *'papaya'*
'ráng *'classifier for arrows'*
be 'bre *'commonplace'*
'drun 'dra *'lots of something (as of bamboo)'*
'greô *'fork, rake'*
'mruô *'arguer'*

'ngráng *'cast iron'*
'bla *'type of glutinous rice'*

4.3 *VOWEL PLUS FINAL-CONSONANT CLUSTERS*

Vowels and final-consonants form an important $-VC_f$ cluster requiring an interrelated discussion of both vowels and final consonants because a different set of vowels is found to occur with each set of final consonants, i.e. not all vowels occur with all final consonants. More important, "register" is an integral part of this $-VC_f$ cluster in that not all final consonants or otherwise permitted vowel plus final-consonant clusters occur with both registers. (Note also the differing historical developments of vowel plus final-consonant clusters of the two registers (6.1). "Vowel plus final-consonant cluster", VC_f, is to be read as "a cluster of vowel plus final consonant" in that there are no final consonant clusters.)

The interdependence of each entity of the vowel plus final-consonant cluster will be noted in the following subsections that discuss, in turn, register, simple vowels, vowel glides, final consonants and nasalisation. A final subsection summarises the principal structural cooccurrence features of the vowel plus final-consonant clusters.

Register

Each vowel plus final-consonant cluster is identified as belonging to either one of two registers (R) which are here termed tense register (TR) and lax register (LR). (Terminologically there is not yet consensus among Southeast Asian linguists for the register phenomena. Some of the sets of terms in current use are given in Chart 4.8.)

In Sedang (unlike other Mon-Khmer languages) lax register vowels (orthographically unmarked) are clear and "normal". Tense register vowels (orthographically marked with acute ´) are laryngealised or glottalised; there is trillisation of the vocal cords. The term "tense" thus refers to the tensing of the vocal folds required to produce this marked, slow trillisation, sometimes called "creaky voice" (cf. Ladefoged (1971) for a photograph of the vocal cords in creaky voice position).

Spectrograms of the Sedang laryngealised syllables appear the same as the corresponding clear vowels during the syllable peak with normal pulsing. A unique feature of laryngealised syllables, however, is the vowel termination in non-rapid speech. The time duration between successive glottal pulses increases and glottal vibrations become irregular. Some pulses are separated by as much as 25 to 32 milliseconds

(which, if periodic or continuous, would correspond to as low as 40 to 30 hertz). One series of laryngealised glottal pulses in the syllable pá has been measured as having successive pulses separated by 11, 13, 15, 18, 18, 24, 32, 25, 27 milliseconds. Spectrographic analysis shows that during laryngealisation energy is concentrated about the first and second formants with no lower harmonics visible on the typical spectrogram. And these formants are not characterised by (the typical) clearly spaced harmonics; instead the formants appear quite fuzzy, in that there are many very closely spaced harmonics. In words with vowel glides, semivowels, or final nasals, there is generally a point toward the end of the vowel duration at which glottal pulse timing starts to spread out, marking the beginning of the laryngealised phase. Such laryngealisation is then carried through even the final nasal consonants.

Tense register	*Lax register*	Halang: Cooper and Cooper (1966:97) Jeh: Gradin (1966:46) Ngeq: R. Smith (1973:84) Hrê: Phillips (1973) Sedang
First register	*Second register*	Khmer: Henderson (1952:151) Jacob (1968) Hrê: Phillips (1962) Brũ: Miller (1967)
Low series	*High series*	Khmer: Jenner (1966:37)
Head register	*Chest register*	Khmer: Henderson (1952) Mon: Shorto (1962, 1967)
Retracted tongue-root position	*Advanced tongue-root position*	Rengao: Gregerson (1971, 1973) Cf. Halle & Stevens (1969)

Chart 4.8 Register terminology in Mon-Khmer linguistics

Spectrographic analysis of Sedang vowels does not show any register differences of vocalic openness (i.e. tongue height). Consonant voicing, pitch, and vowel harmony, though frequently related to register in other languages, do not pertain to the Sedang situation. Register in Sedang is described only by the feature of voice quality as given above.

All the vowels and vowel glides occur (structurally) in both register sets although open syllables ǒa, iǒ have not been observed. The final consonants -p, -t, -k, -h, -ih structurally do not occur with the tense

register. There are some vowel plus final-consonant clusters with the other final consonants which have not been observed with both registers (as will be noted below) though they are presumed to be structurally possible. There is no observable relation or restriction between register and either the presyllable or the consonants of the initial consonant position.

The lax register occurs more frequently than the tense register in both the dictionary count (69%, 979/1409) and the text count (68%, 18,576/27,437). That both these percentages are equivalent indicate that function words are not predominantly of one register.

There is Sedang folk-linguistic terminology which distinguishes the two registers: prong (TR) and prông (LR) (Smith, 1973a).

Register contrastive pairs of words:

ka *'to eat'*; ká *'fish'*
kan *'big'*; kán *'chief'*
bau *'to wash face'*; báu *'field rice'*
pɑla *'chaff'*; pɑlá *'elephant tusk; between'*
ma *'eye'*; má *'we two (excl.)'*
xôi *'to err'*; xối *'to sacrifice'*

Simple vowels

Sedang has seven simple (or unglided) vowels (V) as shown in Chart 4.9. The simple vowels occur in both open and closed syllables and with both registers. Simple vowels are more common than glided vowels in both the dictionary count (81%, 1135/1409) and the text count (87%, 23,819/27,437). The frequency of the simple vowels is given in Chart 4.10. The vowel a, typical of most Southeast Asian languages, has the highest count in both cases.

i [i]	u [u]
ê [e]	ô [o]
e [ɛ]	o [ɔ]
a [a]	

Chart 4.9 Simple vowels, V

	DICT. COUNT		TEXT COUNT	
	No.	%	No.	%
a	348	31	9419	40
o	194	17	2711	11
ô	161	14	3559	15
e	133	12	3316	14
ê	111	10	2077	9
i	96	8	1731	7
u	92	8	1006	4
TOTAL	1135	100	23819	100

Chart 4.10 Dictionary and text frequencies of simple (unglided) vowels

chí *'clean; kind of tree'*
chế *'tea'*
ché *'cloth'*
chá *'tree sap; great-great-grandchild'*

ti *'up high'*
tê *'to sell; to go down; only'*
ta *'to place within; spear trap'*
tu *'hood, umbrella; anthill'*
tô *'hot'*
to *'monkey; to get up onto; general classifier; bean'*

tíng *'to sacrifice; tail'*
téng *'sorcery'*
táng *'to look for; chair'*
tống *'bent tree in spear trap'*
tóng *'pond; to please; to save'*

Vowel glides

The vowel glides (VG) include four central glides (Va), three back glides (Vô), and two front glides (Ve) as shown in Chart 4.11.

Central glides (Va)	*Back glides* (Vô)	*Front glides* (Ve)
ia [iə] ua [uə]	iô [io] uô [uo]	ie [iɩ]
êa [eə] ôa [oə]	êô [eo]	ôe [oɛ]

Chart 4.11 Vowel glides, VG

Central glides have an end point approximating a schwa; back glides an [o]; and front glides an [ɩ] or [ɛ].

Central glides occur in open syllables and before all final consonants except -i, -u, and -ih (on final consonants see following subsection). ôa has not been observed in an open syllable; other incomplete patterns are noted below. Orthographically the circumflex in êa, ôa, etc., is redundant and thus hereafter unwritten: ea, oa, etc.

Back glides occur in open syllables and before velars -ng and -k, and before -h.

Front glides occur only in open syllables.

Charts 4.12 and 4.13 show the dictionary and text counts of vowel glide frequency. Central glides are most common, front glides least common. The text frequency of ia surpasses the other central glides because of the influence of function words hiáng *'already'* (rank 9, 376 times), pian *'we'* (18, 284; elsewhere in this dissertation spelled pin), kia *'ghost'* (23, 231), chiang *'become'* (36, 145). No other central glide occurs before tea *'water'* (47, 118). The text frequency of ôe is greater than ie because of the combined effect of the phrase pôe rœpôe *'to cut soapberry'*, the theme of one of the folktales included in the data base for the count.

kea *'trap; to make design'*
kia *'spirit'*
koa *'pipe'*
kua *'to hold; to hug; roof'*

	DICT. COUNT		TEXT COUNT	
	No.	%	No.	%
Va	227	83	3128	87
Vô	30	11	369	10
Ve	17	6	121	3
TOTAL	274	100	3618	100

Chart 4.12 Dictionary and text frequencies of vowel glide types

	DICT. COUNT		TEXT COUNT	
	No.	%	No.	%
Central glides				
ea	71	31	610	20
ua	62	27	519	17
ia	61	27	1598	51
oa	33	15	401	13
TOTAL	227	100	3128	101
Back glides				
eô	17	57	305	83
uô	11	37	49	13
iô	2	7	15	4
TOTAL	30	101	369	100
Front glides				
ie	12	71	51	42
ôe	5	29	70	58
TOTAL	17	100	121	100

Chart 4.13 Dictionary and text frequencies of vowel glides

teó *'to carry'*
tiô *'to follow'*
tuô *'to bend over'*
kie *'to strip bamboo'*
kôe *'to fold'*

Final consonants

The final consonants (C_f) are shown in Chart 4.14, with minor final consonants enclosed within parentheses. The dissimilarity of the final consonant inventory from the initial single consonant inventory, as well as from the presyllable consonant inventory, recommends the establishment of a separate consonantal system for each consonantal position of the phonological word.

	Bilabial	*Alveolar*	*Palatal*	*Velar*	*Unarticulated*
Stops	-p	-t		-k	
Nasals	-m	-n		-ng	
Vocoids	-u [w]	(-l ∿ -r)	-i [y]		
Aspirates			(-ih) [yh]		-h
Glottals			(-ɪ̆) [y?]		(-ˇ) [?]

Chart 4.14 Final consonants, C_f

All consonants except nasals occur with nasalised vowels (see below). Only final nasal and vocoid consonants occur in tense register clusters whereas all occur in lax register clusters. -ih and -ɪ̆ are complex unit phonemes [yh, y?] (Smith 1968:56-7). Final glottal stop (-ˇ), -ɪ̆, -l, and -r are very infrequent, though entering the language through loans from neighbouring languages.

Chart 4.15 shows the dictionary and text frequencies of final consonants and their absence in open syllables (#). More than one word in three is an open syllable word (i.e. ends with either a vowel or vowel glide) and in text this increases to every other word. Final nasals, -i, -u, and (unaccountably) -h are the most frequent final consonants inasmuch as they have not undergone drastic reduction like the voiceless stops, aspirates, glottals, -l, and -r (6.1).

ta *'(comparative); to place within; spear trap'*
tap *'to bury; to exercise'*
kat *'cabbage; to tie'*
tak *'bran'*
tam *'to wallow; to sleep in field; to fall down (of branches'*
tan *'to scoup up (fish)'*
tang *'to be erect; if; to feel'*

tau *'pig's nest outside village'*
tai *'to be completed; entire'*
tah *'to jerk or pull off'*
tal ∿ tar *'a (flat) board'*
tui *'to rake field'*
tuih *'to sacrifice'*
kom̆aĭ *'machine'* (final -ĭ)
tom̆xĭ *'sea'* (final -˘)

	DICT. COUNT		TEXT COUNT	
	No.	%	No.	%
#	504	36	13760	50
-ng	224	16	3179	12
-i	164	12	4384	16
-h	108	8	2254	8
-u	103	7	836	3
-n	72	5	1190	4
-m	68	5	840	3
-k	62	4	428	2
-t	40	3	330	1
-p	30	2	80	0
Minor cons.				
-˘	15	1	94	0
-ih	10	1	36	0
-l -r	6	0	12	0
-ĭ	3	0	14	0
TOTAL	1409	100	27437	99

Chart 4.15 Dictionary and text frequencies of final consonants including open syllables (#)

Only finals -ng, -k and -h have been observed with all seven simple vowels. Finals -m, -n, -p and -t have been observed following five or six vowels, although structurally it seems as though these holes are co-incidental. Structurally it seems that -i is restricted to just five clusters ei [ei], ai, ui, ôi and oi, and that -u is restricted to just three clusters iu, au and ôu. The other final consonants, -˘, -ĭ, -ih, -l and -r, are minor consonants with too infrequent occurrence to state

the structural relations which they may develop except that the complex finals -ĭ and -ih will not extend beyond the patterns of their component parts -i, -˘ or -h.

Nasalisation

Vowel nasalisation (N) is contrastive in the main syllable in certain restrictive preceding and following environments. Orthographically nasalisation is marked with a grave ` ; nasolaryngealisation with a tilde ˜.

The preceding environment for nasalisation of the vowel must be glottalisation (either glottal stop or h), and/or r or v in the main syllable. Most presyllables (4.4) seem to permit nasalisation of the main syllable vowel if the above criterion is present. Chart 4.16 illustrates these restrictions.

C_i:	Glott.	h	r	'r	hr	v	'v	hv
C_pV_p:								
Ø	àu	hà		'rè	hràì		'vè	hvãi
hơ-	hơ-eõ	hơhiã	hơrẽ	hơ'ràk			hơ'vã	
kơ-	kơ-à	kơhòi		kơ'ràu		kơvà		
mơ-	mơ-àu	mơhã		mơ'riù	mơhrè			
pơ-	pơ-ùk	pơhã						
rơ-	rơ-àh	rơhẽ				rơvèi		
tơ-	tơ-ìt				tơhrà			
i-						ivã		
u-	u-ùt							

Chart 4.16 Examples of preceding environments permitting vowel nasalisation (note: the columns r and hv are insignificant if there is no phonemic difference between hơr- and hr- and between hơv- and hv- (cf. 4.4))

The following environment for nasalisation of the vowel must be an open syllable (Ø), -h, voiceless stop (although p has not been so observed), and the vocoids -i and -u. (Neither has -ih been observed nasalised although it consists of two nasalisation-permitting environments -i and -h.) As noted above, the final stops and -h do not occur in tense register clusters, so do not permit nasolaryngealisation either. Chart 4.17 illustrates these restrictions.

C_f:	-Ø	-h	-t	-k	-i	-u
Nasalised vowels	è	èh	mơhòt	hàk	hơ-ùi	mờhàu
Nasolaryngealised vowels	hẽ	x	x	x	hãi	kơ-õu

Chart 4.17 Examples of following environment permitting vowel nasalisation (x indicates structural restriction for laryngealisation)

Nasalised vowels are uncommon, occurring in only 3% (42/1409) of the words of the dictionary count (my full dictionary listing includes about 94 nasalised words) and in 2% (451/27437) of the text count. Despite the general infrequent occurrence of nasalised vowels within the stated nasalisation-permitting environments, nasal vowels are on a par with oral vowels: in the limited environment where 94 nasalised vowels occur, there also occur only 124 non-nasalised vowels; or, in such environments 43% of the words are nasalised. Though nasalised words are in the minority in such environments one suspects that nasalisation is normal and oral vowels are marked. For example, Vietnamese họk *'to study'* has no nasal aspect, yet as a recent borrowing into Sedang, occurs nasalised as hòk.

Chart 4.18 cites the dictionary and text frequencies of the four-way register and nasal contrast.

	Oral vowels				*Nasal vowels*			
	DICTIONARY		TEXT		DICTIONARY		TEXT	
	No.	%	No.	%	No.	%	No.	%
Clear vowels	947	67	18363	67	32	2	213	1
Laryngealised vowels	420	30	8623	31	10	1	238	1

Chart 4.18 Dictionary (1409 words) and text (27,437 words) frequencies of vowels with register and/or nasal modification

Nasal and register contrastive sets:

ha	*'crowded'*	LR - oral
há	*'open mouth'*	TR - oral
hà	*'Dak Ha village name'*	LR - nasal
hã	*'also'*	TR - nasal
ia	*'few'*	
iá	*'to respect'*	
ià	*'section of field; to dry rice; a river name'*	
iã	*'easy'*	

Summary of vowel plus final-consonant clusters

The principal structural cooccurrence features of the vowel plus final-consonant clusters are:

(1) The register contrast pertains only to the open syllables and those with final nasals, -i, or -u.

(2) The nasal-oral contrast pertains to all syllables except those with final nasal consonant.

(3) The seven simple vowels occur in open syllables and with each final consonant, though in varying patterns.

(4) Central glides occur only in open syllables and with final nasals, stops, and -h.

(5) Back glides occur only in open syllables and with final velars -ng and -k and with -h.

(6) Front glides occur only in open syllables. (They have not been observed nasalised.)

Chart 4.19 shows all vowel plus final-consonant clusters observed to date. The three parts of the chart group those clusters with (a) both register and nasal contrasts, (b) only register contrasts, and (c) only nasal contrasts. Though Chart 4.19 includes 196 different observed clusters, at least 312 different combinations seem structurally possible - many of which, with additional data, will undoubtedly be found. The text material used for the dictionary and text frequency counts included only 166 different vowel plus final-consonant clusters among its 1409 different words. Only twenty-two of these clusters account for 43% of the words and 69% of the text. Chart 4.20 lists these 22 clusters, i.e. all clusters which have either a dictionary or text count of at least 2%.

	Open syl., ø		-i		-u	
	Oral	Nasal	Oral	Nasal	Oral	Nasal
Clear vowels	i u ê ô e a o	ì ù è è à ò	ui ei ôi ai oi	ùi èi òi ài	iu ôu au	iù àu
	ia ua ea oa	ià ùa èa òa				
	iô uô eô					
	ie ôe					
Laryngealised vowels	í ú é ó é á ó	ĩ ẽ ẽ ã	éi ói ái ói	ỗi ãi	iú óu áu	ỗu
	iá úa éa	iã ũa ẽa				
	uó eó	eỗ				
	ié óe					

Chart 4.19 Vowel plus final-consonant clusters: part (a) Clusters with both register and nasal contrasts (each sector of the chart has four vertically-adjacent boxes enclosing, from top to bottom, simple vowels, central glides, back glides, and front glides)

	-m			-n			-ng		
Clear vowels	i m		u m	i n		u n	i ng		u ng
			ô m			ô n	ê ng		ô ng
	e m	a m	o m	e n	a n	o n	e ng	a ng	o ng
	i a m		u a m	i a n		u a n	i a ng		u a ng
							e a ng		o a ng
									u ô ng
Laryngealised vowels			ú m	í n		ú n	í ng		ú ng
			ő m						
	é m	á m	ó m	é n	á n	ó n	é ng	á ng	ó ng
	í a m		ú a m	i á n		ú a n	i á ng		ú a ng
	é a m			é a n			é a ng		ó a ng

Chart 4.19 Vowel plus final-consonant clusters: part (b)
Clusters with only register contrasts

-p		-t		-k	
Oral	*Nasal*	*Oral*	*Nasal*	*Oral*	*Nasal*
ip up ôp ep ap		it et at ot	ìt ùt àt òt	ik uk êk ôk ek ak ok	ìk ùk èk òk èk àk òk
iap uap eap		iat uat		iak uak eak	 èak
				iôk uôk	iòk

-h		-˘		*Others*
Oral	*Nasal*	*Oral*	*Nasal*	
ih uh êh ôh eh ah oh	ìh ùh èh àh òh	ĭ ŭ ĕ ŏ ĕ ă ŏ		-ih: ôih, uih -ĭ: aĭ, oĭ -l: el -r: ar
iah uah eah oah				
uôh				

Chart 4.19 Vowel plus final-consonant clusters: part (c)
Clusters with only nasal contrasts

	DICT. COUNT		TEXT COUNT	
	No.	%	No.	%
-a	72	5	2290	8
-o	69	5	1416	5
-ôu	38	3	454	2
-ei	37	3	715	3
-á	35	2	2456	9
-ai	35	2	1912	7
-u	30	2	526	2
-ó	28	2	373	1
-ê	26	2	423	2
-áng	25	2	377	1
-i	24	2	1162	4
-ői	23	2	509	2
-ang	23	2	297	1
-éang	22	2	229	1
-oh	22	2	206	1
-ah	20	1	528	2
-eh	17	1	581	2
-ôh	16	1	688	3
-e	13	1	1833	7
-ôi	11	1	441	2
-iáng	5	0	491	2
-ő	3	0	647	2
144 others	815	58	8883	32
TOTAL	1409	101	27437	101

Chart 4.20 Dictionary and text frequencies of 22 most common vowel plus final-consonant clusters (including open syllables)

4.4 *PRESYLLABLES*

Presyllables (C_pV_p) are the unstressed-consonant-plus-vowel syllables which precede the stressed main syllables described above. There are five types of presyllables: major presyllables (accounting for 96% (1847/1914) of all presyllables in the dictionary count), major consonantal reduplicative presyllables, major complete reduplicative presyllables, extended consonantal reduplicative presyllables and extended complete reduplicative presyllables. Partial morpheme reduplication (12.6) accounts for some, but not all, reduplicative presyllables.

Major presyllables

Major presyllables are restricted to a limited set of consonants followed by a schwa vowel (written -ơ-). With an initial (unwritten) glottal, however, the vowel may be either schwa (here written a- (ơ never occurs without a preceding consonant)) or i-. The major presyllables are shown in Chart 4.21. The presyllables bơ-, xơ-, and jơ- occur so infrequently that they are considered minor presyllables.

	Bilabial	*Alveolar*	*Palatal*	*Velar*	*Glottal*
Stop	pơ-	tơ-		kơ-	a-, i-
Nasal	mơ-				
Oral		lơ-, rơ-			hơ-
Minor	bơ-	xơ-	jơ-		

Chart 4.21 Major presyllables showing major presyllable consonant set, C_p (the consonant symbols have the same phonetic value as given for initial consonants (4.1))

Presyllables pơ-, tơ-, kơ-, and mơ- are sometimes, but not usually, affixes; lơ- is usually an affix (12.1-5).

Presyllables hơ- and rơ- are followed by a non-phonemic [s] before voiceless stops; thus: rơta [rəsta].

There are various cooccurrence patterns and restrictions between the presyllables and following consonants or consonant clusters:

(1) mơ- only rarely precedes a voiceless consonant other than h and glottal, and never precedes homorganic b or v.

(2) Complementing (1) presyllable pơ- only rarely precedes a voiced stop (sometimes pơ- and mơ- alternate in words with voiced stops) and never precedes homorganic m or v.

(3) Presyllable kơ- does not precede homorganic g.

(4) By definition no basic presyllable precedes a consonant identical to the presyllable consonant (such would be a major consonantal reduplicative presyllable, for which see below).

(5) Aspirated consonant clusters (ph, th, and kh) and the complex consonant clusters rarely occur following a presyllable.

(6) Initials y and hy, recently introduced into Sedang, have not yet been observed in bisyllabic words (except Bahnar loan bơyang *'God'*).

Chart 4.22 lists all observed major presyllables with the consonants or consonant clusters which they precede. The minor presyllables are not included in the chart but have been observed only as follows: bơ--, bơn-, bơhn-, bơr-, bơy-; jơl-, jơr-, jơx-; xơ'd-, xơl-, xơm-, xơr-. Though Chart 4.22 includes 219 different observed clusters, at least 444 different combinations seem structurally possible.

The presyllable vowel discriminates between bisyllabic words and monosyllabic words with an initial consonant cluster in the following pairs: ph- and pơh- (the latter, but not the former, permits vowel nasalisation); pl- and pơl-; pr- and pơr-; th- and tơh-; tl- and tơl-; tr- and tơr-; kh- and kơh- (the latter, but not the former, permits vowel nasalisation); kl- and kơl-; kr- and kơr-; mr- and mơr-; hm- and hơm-; hn- and hơn-; hnh- and hơnh-; and hng- and hơng-. The following contrasts are at best only tenuous: hv- and hơv-; hr- and hơr- (both members of these two pairs permit nasalisation); hl- and hơl-. There is no bisyllabic word with presyllable and initial consonant corresponding to the consonant clusters ml and hy.

Chart 4.22 overleaf.

	mɔ-	pɔ-	tɔ-	kɔ-	hɔ-	rɔ-	lɔ-	a-	l-
p	x	REDUP	tɔp-	kɔp-	hɔp-	rɔp-	lɔp-	ap-	ip-
ph	x	"		kɔph-					
pl	x	"	tɔpl-	kɔpl-		rɔpl-		apl-	ipl-
pr	x	"	tɔpr-						ipr-
t	mɔt-	pɔt-	REDUP	kɔt-		rɔt-	lɔt-		it-
th	x		"	kɔth-	hɔth-	rɔth-		ath-	
tl	x		"						
tr	x	pɔtr-	"	kɔtr-	hɔtr-	rɔtr-	lɔtr-		
ch	x	pɔch-	tɔch-	kɔch-		rɔch-	lɔch-	ach-	
k	x	pɔk-	tɔk-	REDUP	hɔk-	rɔk-	lɔk-		
kh	x	pɔkh-	tɔkh-	"			lɔkh-		
kl	x	pɔkl-	tɔkl-	"	hɔkl-		lɔkl-		lkl-
kr	x	pɔkr-	tɔkr-	"	hɔkr-	rɔkr-	lɔkr-	akr-	ikr-
b	x	x	tɔb-	kɔb-	hɔb-	rɔb-			
bl	x	pɔbl-		kɔbl-	hɔbl-	rɔbl-			
br	x	x	tɔbr-	kɔbr-	hɔbr-				
'b	x	pɔ'b-	tɔ'b-	kɔ'b-		rɔ'b-			
'br	x	x							
'bl	x	x		kɔ'bl-					
d	mɔd-	pɔd-	tɔd-	kɔd-	hɔd-	rɔd-			
dr	mɔdr-	pɔdr-	tɔdr-	kɔdr-	hɔdr-				idr-
'd	mɔ'd-	x	tɔ'd-	kɔ'd-		rɔ'd-			
'dr		x							
j	mɔj-	pɔj-	tɔj-	kɔj-	hɔj-	rɔj-			
g	mɔg-	x	tɔg-	x	hɔg-	rɔg-	lɔg-		
gl		x		x					
gr	mɔgr-	x		x					igr-
'gr		x		x					
m	REDUP	x	tɔm-	kɔm-	hɔm-	rɔm-	lɔm-	am-	lm-
ml	"	x	tɔml-						
mr	"	x	tɔmr-	kɔmr-	hɔmr-				imr-
hm	"	x	tɔhm-		REDUP	rɔhm-	lɔhm-		
'm	"	x	tɔ'm-		hɔ'm-	rɔ'm-			
'mr	"	x							
n	mɔn-	pɔn-	tɔn-	kɔn-	hɔn-	rɔn-			in-
hn	mɔhn-	pɔhn-	tɔhn-	kɔhn-	REDUP				
'n	mɔ'n-	pɔ'n-		kɔ'n-	hɔ'n-	rɔ'n-	lɔ'n-	a'n-	l'n-
nh	mɔnh-		tɔnh-	kɔnh-	hɔnh-	rɔnh-		anh-	
hnh		pɔhnh-		kɔhnh-	REDUP			ahnh-	
'nh	mɔ'nh-	pɔ'nh-	tɔ'nh-				lɔ'nh-		
ng	mɔng-	pɔng-	tɔng-	kɔng-	hɔng-	rɔng-	lɔng-	ang-	ing-
(ngr)			tɔngr-						
hng					REDUP				
'ng			tɔ'ng-						
'ngr									
v	x	x	tɔv-	kɔv-	hɔv-	rɔv-			iv-
hv	x	x			REDUP				
'v	x	x		kɔ'v-	hɔ'v-				
l		pɔl-	tɔl-	kɔl-	hɔl-	rɔl-	REDUP	al-	il-
hl		pɔhl-	tɔhl-	kɔhl-	REDUP		"		
'l		pɔ'l-	tɔ'l-	kɔ'l-	hɔ'l-		"		
r	mɔr-	pɔr-	tɔr-	kɔr-	hɔr-	REDUP			ir-
hr	mɔhr-	pɔhr-	tɔhr-		REDUP	"			
'r	mɔ'r-	pɔ'r-	tɔ'r-	kɔ'r-	hɔ'r-	"			
y	x	x	x	x	x	x	x	x	x
hy	x	x	x	x	x	x	x	x	x
x		pɔx-	tɔx-	kɔx-		rɔx-			
s		pɔs-	tɔs-			rɔs-		as-	
h	mɔh-	pɔh-	tɔh-	kɔh-	REDUP	rɔh-	lɔh-		ih-
-	mɔ--	pɔ--	tɔ--	kɔ--	hɔ--	rɔ--	lɔ--	REDUP	REDUP

Chart 4.22 All observed major presyllable plus initial consonant or consonant cluster combinations (parentheses about initial consonant cluster indicate it has not been observed apart from a presyllable; REDUP indicates reduplicative pattern for which see following sections; x indicates strong structural pressure against its occurrence)

Chart 4.23 shows the dictionary and text frequencies of all presyllables.

	DICT. COUNT		TEXT COUNT	
	No.	%	No.	%
Major presyl.				
kə-	455	23	680	28
tə-	371	19	508	21
hə-	267	13	258	11
rə-	273	14	300	13
pə-	221	11	253	11
mə-	134	7	262	11
lə-	53	3	25	1
i-	41	2	52	2
a-	32	2	16	1
Minor presyl.				
bə-	9	1	7	0
xə-	19	1	1	0
jə-	3	0	0	0
Redup. presyl.				
19 types	36	2	37	1
TOTAL	1914	98	2399	100

Chart 4.23 Dictionary and text frequencies of presyllables

Major consonantal reduplicative presyllables

In major consonantal reduplicative presyllables, the presyllable consonant is a major presyllable consonant (cited above) and precedes a main syllable having an identical initial consonant or consonant cluster. The presyllable vowel is either schwa, -ɨ-, or -u-, as shown in Chart 4.24. There does not appear to be any factor which conditions the presyllable vowel in these cases, so they are presumed contrastive despite the otherwise noncontrastive character of the presyllable vowel in major presyllables. If the main syllable vowel is i or u and corresponds to the presyllable vowel, the major consonantal reduplicative presyllable is indistinguishable from the major complete reduplicative presyllable described below (cf. kiki, hihia, i-iu).

Major complete reduplicative presyllables

In major complete reduplicative presyllables, the presyllable consonant is a major presyllable consonant (cited above) and precedes a main syllable having an identical initial consonant or consonant cluster. The presyllable vowel is duplicative of the main syllable vowel (though unglided and with neither register nor nasal contrast). Cf. the following:

ê-êa	hêhé
ô-ôh	lalám
pêpé	lelém
toton	momot

-ơ-	-i-	-u-
mơm-	mim-	mum-
pơp-		pup-
		pupl-
		pupr-
tơt-	tit-	tut-
	tith-	
tơtr-		
kơk-	kik-	kuk-
		kukh-
kơkl-	kikl-	kukl-
		kukr-
	hih-	huh-
rơr-	rir-	rur-
lơl-	lil-	lul-
lơhl-		luhl-
		lu'l-
	i--	u--
	(i-ia)	(u-uh)
	xix-	xux-

Chart 4.24 Major consonantal reduplicative presyllables

Extended consonantal reduplicative presyllables

In extended consonantal reduplicative presyllables, the presyllable consonant or consonant cluster (not a major presyllable consonant) is duplicative of the main syllable initial consonant or consonant cluster.

The presyllable vowel is -i- or -u-. If the main syllable vowel is i or u, and corresponds to the presyllable vowel, the extended consonantal reduplicative presyllable is indistinguishable from the extended complete reduplicative presyllable (cf. chuchua, nunúm).

-i-	-u-
'bi'bŏl	
chichôu, chichu	chuchi, chuchie, chuchiu
	dudat
'di'do, 'di'dot	
krikrŏu	krukreŏ
nino	nunit
	hnuhnai
'ni'no	
nhinhon	nhunhiat
pripro	
hrihroh	
tritrôu	

Extended complete reduplicative presyllables

In extended complete reduplicative presyllables, the presyllable has a presyllable consonant or consonant cluster other than a major presyllable consonant, duplicative of the main syllable initial consonant or consonant cluster, and a presyllable vowel duplicative of the main syllable vowel.

dradrai, dredreng
'mo'mo, 'mo'mo
ngongŏ
prôprông

The above five types of presyllables with following environment when relevant may be summarised as follows and as in Chart 4.25.

C_pV_p...:

(1)	$C_p\sigma$...	Major presyllable
(2)	C_p-σ/i/u-$(C_m)C_p(C_m)$...	Major cons redup presyl
(3)	C_pVC_pV...	Major comp redup presyl
(4)	$(C_m)C_i(C_m)$-i/u-$(C_m)C_i(C_m)$...	Ext cons redup presyl
(5)	$(C_m)C_i(C_m)V(C_m)C_i(C_m)V$...	Ext comp redup presyl

Not included within the presyllable structures described above are two words with nasalisation of the presyllable vowel:

ù-ùt *'small red bird'*
'rù'ròh duplicative form of 'roh *'to excise, extract'*

Also not included are chǒkhóng *'shoes'* (borrowed from Bahnar) and ulap *'a village name'*.

Presyllable consonantal reduplicativity:		*Non-reduplicative consonant*	*Reduplicative main syllable consonant*	
Presyllable vowel:		-σ-	-i-, -u-	*Duplicative main syllable vowel*
Presyllable consonants:	Major presyllable consonant set C_p	1. Major presyllable (96%) $C_p\sigma$	2. Major consonantal reduplicative presyllable (3%) C_p-σ/i/u- ⟷	3. Major complete reduplicative presyllable C_pV
	All other consonants and consonant clusters $(C_m)C_i(C_m)$	x	4. Extended consonantal reduplicative presyllable $(C_m)C_i(C_m)$-i/u- ⟷	5. Extended complete reduplicative presyllable $(C_m)C_i(C_m)V$

Chart 4.25 Presyllable types (arrows indicate partial overlap of definition with main syllable i and u vowels)

4.5 *PHONOLOGICAL WORD REDUPLICATION*

Prior to this point, this chapter has described the various features of mono- and bisyllabic phonological words. It should be noted that almost all lexical words consist of a single phonological word. There are a few lexemes, however, which consist of more than a single phonological word, but may be two or three mono- or bisyllabic phonological words with duplication of one or more phonological parts. Onomatopoeia (12.10) uses extensive phonological word reduplication.

Monosyllabic phonological word reduplication:

Complete word reduplication

'blut 'blut *'little by little'*

Consonant-vowel reduplication

bang bal *'kind of catfish'*
dang dak *'to climb up steep mountain'*

Initial and final consonant reduplication

'but 'bat *'scattered all over the place'*
kung king kóng *'elbow'*

Initial consonant reduplication

rê róng *'a fearful cry'*
blu blep *'to rush in'*
bling blea *'an "x" mark'*
chêk chang *'to lie on one's side'*
kung keŏ *'knee tendon'*

Bisyllabic phonological word reduplication:

Presyllable and initial consonant reduplication

kơ'blôu kơ'bla *'very crowded'*
kơ'nôk kơ'nak *'(of wet flesh) to be white and puffy'*

4.6 *ALPHABETISATION*

Alphabetisation of Sedang words by this writer (cf. *Index of Sedang Words*, Smith 1967a, primer series) is based upon the following principles:

(1) Where Sedang phonology and orthography parallel Vietnamese, the Vietnamese alphabetisation system of Nguyễn-Đình-Hoà in *Hoa's Vietnamese-English Dictionary* is followed. It is based primarily on the usual order of the Roman alphabet. This implies the following:

(a) Digraphs and consonant clusters are alphabetised as units, not inserted within single letter sections; cf. ch, kh, ng, nh, ph, th, tr.

(b) Vowel letters with added vowel diacritics are alphabetised as units after the vowel without the diacritic; cf. Vietnamese a, ă, â; e, ê; o, ô, ơ; u, ư; but Sedang e, ê; o, ô.

(c) In vowel glides each letter is considered a separate entity.

(2) Where Sedang phonology and orthography differs from - yet parallels - Vietnamese, the Vietnamese established pattern is followed.

(a) Sedang has consonant clusters not found in Vietnamese, but these are alphabetised as units (cf. Vietnamese tr); thus bl, br, 'b, 'bl, 'br are alphabetised apart from b; ml, mr, hm, 'm are alphabetised apart from m.

(b) Sedang marks register and nasalisation using Vietnamese tone diacritics. In Vietnamese the tone diacritics are alphabetised as though the tone diacritic was inserted immediately following the final consonant, if present. The alphabetic order of Sedang diacritics thus is: ′ (laryngealisation), ` (nasalisation), ˜ (nasolaryngealisation). Therefore: pah, pai, pái, pài, pãi, pak.

(c) In Sedang orthography the breve ˘ represents final glottal stop whereas in Vietnamese the breve represents a short vowel. In Sedang alphabetisation it follows the above diacritics and has priority over any following letter (in another word).

(3) Where Sedang and Vietnamese phonology, and thus orthography, differ, Sedang practice determines its own conventions.

(a) Sedang has a phoneme and letter not found in Vietnamese. It is alphabetised in the usual Roman manner; cf. j.

(b) Sedang bisyllabic words are unlike Vietnamese. Bisyllabic words are alphabetised as a group immediately following monosyllabic words beginning with the same letter.

(c) Sedang voiceless consonants, orthographically consonants preceded by an h, are considered digraphs (or trigraphs) and are alphabetised immediately following the corresponding voiced consonant (including such presyllable consonants), rather than within the h section.

(d) Sedang preglottalised consonants, orthographically consonants preceded by an apostrophe ', are considered digraphs (or trigraphs) and are alphabetised immediately following the consonant (and its presyllable and other consonant clusters) so modified. Voiceless consonants are alphabetised before preglottalised consonants.

(e) In vowel glides the circumflex in êa, ôa and êô is redundant; thus though the circumflex is omitted (ea, oa, eô), the vowel

letter is alphabetised with other circumflexed vowels to retain similar vowel quality within the section.

The order of sections within a Sedang dictionary or the Sedang alphabetic order follows. This is a practical rather than theoretical alphabet. Other sections may be added as consonant clusters or presyllables not now included may occur. The symbol - indicates bisyllabic word; bơ-, etc. represents any bisyllabic word beginning with b regardless of presyllable vowel.

´, ` , ~, ˘, a, a-, b, bơ-, bl, br, 'b, 'bơ-, 'bl, 'br, ch, chơ-, d, dơ-, dr, drơ-, 'd, 'dơ-, 'dr, e, ê, ê-, g, gl, gr, 'gr, h, hơ-, i, i-, j, jơ-, 'j, k, kơ-, kh, kl, kr, krơ-, kv (see chapter 5), l, lơ-, hl, 'l, m, mơ-, ml, mr, hm, 'm, 'mơ-, 'mr, n, nơ-, hn, hnơ-, 'n, 'nơ-, ng, ngơ-, ngr, hng, 'ng, 'ngr, nh, nhơ-, hnh, 'nh, o, ô, ô-, p, pơ-, ph, pl, pr, prơ-, r, rơ-, hr, hrơ-, 'r, 'rơ-, s, t, tơ-, th, tl, tr, trơ-, u, u-, v, hv, 'v, x, xơ-, y, hy.

5. SYNCHRONIC PHONOLOGY: DIALECTAL VARIATIONS

5.0 *INTRODUCTION*

The Sedang themselves distinguish at least seventeen Sedang (ethno-) dialects (Smith 1969b,1973b). Their ethnodialectal terminology focuses principally on the variations of the vowel plus final-consonant cluster ai, as it occurs in the Sedang word kơklai *'what?'* and ti lai *'how, why?'*. These are variations of vowel, final consonant and register (5.1 through 5.3). Other differences are lexical or are variations of the initial consonant cluster. The seventeen ethnodialects (with vowel plus final-consonant cluster variations in parentheses) are:

1. rơtéang kơlĕ (ĕ)
2. rơtéang kơlei (ei)
3. rơtéang kikle (e)
4. rơtéang kơklai (ai)
5. rơtéang kơkli yau (i)
6. rơtéang kơkli (i)
7. rơtéang kia kiklei (ei)

8. rơtéang kiă kli (i)
9. rơtéang ti lai (ai)
10. rơtéang ti là̀i (à̀i)
11. rơtéang ti lòi (òi)
12. rơtéang tea lèi (èi)
13. rơtéang chu lì (ì)
14. rơtéang chu lêi (êi)
15. rơtéang chu laĭ (aĭ)
16. rơtéang nam lai (ai)
17. rơtéang ko'nân (-)

(` indicates a breathy vowel, ˆ a dipping contour like the Vietnamese hỏi tone, â a short schwa vowel as in Vietnamese.) Map 5.1 locates these ethnodialects in the Sedang area.

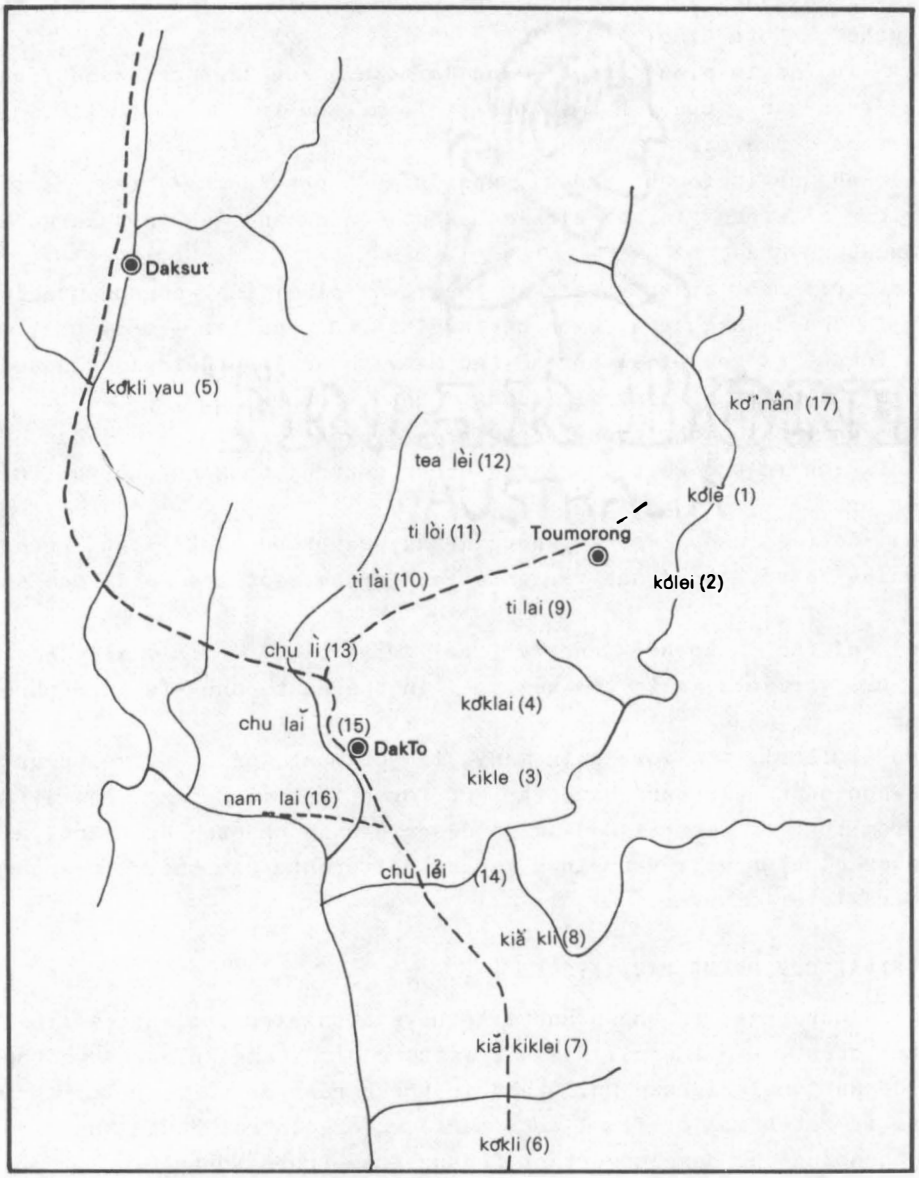
Though the ethnodialectal terminology focuses on the pronunciation of only one or two specific words in the various Sedang areas, the vowel plus final-consonant variations occur correspondingly in the Sedang areas in all words with final -ai (e.g. mai *'brother- or sister-in-law'*, plai *'fruit'*, tai *'entire'*, kai *'to be able'*, vai *'they'*, kơ'nai *'behind'*, phai *'to be full'*, etc.

There are other dialect variations not suggested in the ethnodialect terminology, including differences in the presyllable, initial consonants, and the denasolaryngealisation phenomenon (5.4 through 5.6). Vocabulary differences are mentioned in 5.7.

5.1 *VOWEL VARIATIONS*

The main vowel in standard -ai is seen above to vary through the range i, ê (in ei), e, a and o. Some of these vowels are diphthonised with -i. The general pattern – though not consistently true – is that -ai occurs throughout the central Sedang area, -i in the west and south, -ei in the southwest, and -e in a pocket east of DakTo. This highlights a principal feature of Sedang dialects as well as that which best describes the differences of the Vietnam Mon-Khmer languages – vowel instability. Indeed Thomas (1964b:160-1) has summarised that one difficulty in Mon-Khmer comparative studies "is the complexity of the vowel shifting that has taken place in Mon-Khmer making it very difficult to establish regular patterns... Other comparativists have stated flatly that regular sound-laws simply do not exist in Mon-Khmer vowels..."

As was shown in chapter 4, vowels are an integral part of the vowel plus final-consonant cluster. In dialectal variations, vowels are also conditioned by this environment. For example, whereas open syllable a and á are stable throughout the Sedang area, with a following consonant



Map 5.1 LOCATION OF SEDANG ETHNODIALECTS (numbers correspond to numbered list in text; ◉ indicate government district centres)

the vowel may vary in different ways. The varying a in -ai has already been noted. Note also:

(a) -au (as in plau *'thigh'*, xau *'afraid'*, kau *'serpent-head fish'*, rœpau *'thousand'*, etc.) has alternate forms -ôu in the southeast and -u in most border areas;

(b) -ah (as in tœpah *'seven'*, xah *'play'*, pah *'snake'*, tah *'castrate'*, etc.) has alternant forms -eih in DakSut Sedang and -eh in a large southwestern area.

Similarly many other vowels in the vowel plus final-consonant clusters shift in the Sedang area, each having its own peculiar — and sometimes indistinct — geographical spread and many thrusting their isoglosses through the heart of central Sedang. Note, for example:

(a) -ôh (as in môh *'nose'*, pôh *'roast'*, kôh *'greet'*, etc.) has variants -oh in the west and a few other central pockets and -uh in border areas;

(b) -ôu (as in ôu *'drink'*, pôu *'drunk; carry on back'*, tôu *'breast'*, kœpôu *'buffalo'*, etc.) has variants -au in the west and -o in the southeast;

(c) -ei (as in kœchei *'sneeze'*, pei *'work'*, mei *'rain'*, xei *'horse'*, etc.) has variants -e in the west, -i in the east, and -ie in KonHreng Sedang.

And similarly the vowels in many, if not most, of the vowel plus final-consonant clusters have variant forms in some Sedang area differing from that of central Sedang as described in chapter 4. Also, a lax register cluster will vary in a manner different than the corresponding tense register cluster.

5.2 *FINAL CONSONANT VARIATIONS*

The cluster -ai is shown above to have among its variants a final glottal stop. A principal dialect feature of Sedang in areas to the west of National Highway No.14 and in the border areas near Tœdrah and Rengao is retention of final consonants which central Sedang has lost (cf. phonological development of Sedang from Proto-North-Bahnaric, chapter 6). In the southern (Tœdrah?, cf. Gregerson and Smith 1973) area there is a merging of voiceless stops with final glottal stop.

5.3 *REGISTER VARIATIONS*

The lax register cluster -ai has accompanying breathiness in the west and south as the Sedang area merges into the Rengao and Tœdrah language areas. This is a dialect characteristic of the lax register clusters in general. Whereas in central Sedang the register contrast is manifested

by normal vowels for the lax register, in the border areas, like the surrounding languages, it is manifested by breathy vowels. Similarly, whereas in central Sedang the tense register is manifested by laryngealised vowels, there are clear vowels in the border areas.

5.4 *PRESYLLABLE VARIATIONS*

Presyllables are generally unstable in Mon-Khmer languages with frequent (sometimes inexplicable) consonant changes or loss. Sedang presyllable variation is not generally structural; rather each word with a presyllable is a law unto itself, having its own pattern of variants. Only two systematic presyllable variations have been noted:

(a) rɔ- with non-phonemic s before voiceless stops (as in rɔkái *'boar'*, rɔkong *'mouth'*, rɔtéang *'Sedang'*, rɔpám *'field shed'*, etc.) has variants hɔ- or h- in the west, s- in Kotua Sedang (near Mang Buk), and unpredictable dropping of the non-phonemic s throughout the central and greater Sedang area;

(b) presyllable metathesis occurs in at least two southwest central Sedang villages (Tea Jong, Tea Kɔxan), as in:

akpau	for kɔpau	*'blanket'*
akxiang	for kɔxiang	*'bone'*
ardá	for rɔdá	*'to stutter'*
arhêng	for rɔhêng	*'to like'*
astá	for rɔtá	*'handspan'*
apxí	for pɔxí	*'trigger'*
apxám	for pɔxám	*'wild chicken'*

5.5 *INITIAL CONSONANT VARIATIONS*

The most notable initial consonant variation is that some x (i.e. those which are reflexes of PNB *y rather than PNB *s (see chapter 6), like xúan *'Vietnamese'*, xéang *'spirit'*, xau *'afraid'*, xón *'tall'*, etc.) of central Sedang sometimes have a y variant in the northwest and south, and always in the more distant border areas.

5.6 *DENASOLARYNGEALISATION PHENOMENON*

The process of denasolaryngealisation is perhaps the most intriguing aspect of Sedang dialects because of its very stark change across the Sedang area and because it affects a wide range of vowel plus final-consonant clusters, including such frequent clusters as áng, éang, iáng, etc. It is described in Smith (1973a:55):

> "Words having a final nasal consonant (m, n, or ng) and a clear tense register vowel in Proto-North-Bahnaric as well as in the present-day languages surrounding the Sedang language

> area have a laryngealized tense register vowel in Early Sedang. Though some portions of the Sedang language area continue to retain the laryngealized vowel and final nasal, more recently there has developed a further progression wherein a strengthened laryngealization of the vowel has affected the final nasal consonant to the point of cutting it off prematurely with a glottal stop, or sometimes entirely dropping the nasal and replacing it with a final glottal stop. Laryngealization of the vowel, whether present or absent, then becomes irrelevant, inasmuch as final glottal stop does not elsewhere occur in these dialects...
>
> Each phase of the denasolaryngealization process is still current today among Sedang dialects and neighboring languages. The process has been stated as a rule..., in which V represents any clear vowel, V́ any laryngealized vowel, N any final nasal n, m, or ng, (N) a weakly articulated nasal, and a raised dot · a lengthened vowel:
>
> VN of Area A becomes V́N in Area B, which becomes V́·(N) and V(N)q in Area C, which becomes V(Ø-ô-i/e)q and Vq in Area D. (The alternate forms for the first type of Area D correspond to the three nasals ng, m, and n, respectively.)

Area A includes KonHreng Sedang as well as neighbouring Rengao and Tơdrah; Area B includes DakSut Sedang as well as the western and southeastern Greater Sedang areas; Area C is southwestern central Sedang and Area D is central Sedang. This gives rise to such variant forms as:

	'Sedang'	*'five'*	*'four'*	*'squash'*
Area A	hơdeang	pơtam	pun	pian
Area B	rơtéang	pơtám	pún	pián
Area C, type 1	rơté·a(ng)	pơtá·(m)	pú·(n)	pí·a(n)
type 2	rơtea(ng)q	pơta(m)q	pu(n)q	pia(n)q
Area D, type 1	rơteaq	pơtaôq	puiq	pieq
type 2	rơteaq	pơtaq	puq	piq

5.7 *VOCABULARY DIFFERENCES*

Dialects differ in vocabulary as well as in pronunciation. Though the vocabulary of villages of central Sedang are 98-100% cognate with each other, the vocabulary of villages in border areas drops to 88-90% cognate with central Sedang. A few notable vocabulary differences are:

lám, brôk *'to go'*
hme, pua *'cooked rice'*
ngoh, nhong, da *'older brother'*
kơde, hơnă, pơlot *'to kill'*
ti déi, ngôi, hiô *'to have a good time'*

Vocabulary differences of 10-12% in the border areas together with the many and sometimes major sound shifts, produce sufficient problems

for intelligibility that such groups as the Sedang-Rengao in the west about DakMot, the Todrah in the south near KonHreng (whom Rengao call "Sedang" and Sedang call "Rengao"), the Kotua in the east near Mang Buk and the (M)Bonâm to the southeast cannot be included within the Sedang language area.

More detail of Sedang dialects with accompanying maps is given in Smith (1967b).

There is little or no information on the social concomitants of the dialects.

6. DIACHRONIC PHONOLOGY: DEVELOPMENT FROM PROTO-NORTH-BAHNARIC

6.0 *INTRODUCTION*

As was shown in chapter 3, Sedang has derived from Proto-North-Bahnaric (PNB) but has undergone considerably more sound change than its neighbours. Mergers have produced holes in the sound system which are now being filled as Sedang reverts to a typical North Bahnaric sound system (6.1). The lexicon has also been influenced by borrowings from various contact languages (6.2). The PNB information is from Smith (1972), a study based on 571 cognate sets. A brief inspection of Proto-Bahnaric reconstructions by Phillips (1971) indicated essentially similar results and would not substantially affect this discussion.

6.1 *PRINCIPAL SOUND CHANGES FROM PROTO-NORTH-BAHNARIC*

The principal sound changes from PNB will be discussed by word position as in chapter 4.

Initial consonants and consonant clusters

PNB had the same inventory of twenty initial consonants as Sedang now has, as shown in Chart 4.1 (section 4.2) – but the PNB and Sedang consonants do not have a one-for-one correspondence. Sedang voiceless stops, nasals, and orals (except y) derive, in part, from the same type of consonants in PNB.

PNB	*pun	Sdg	puán	*'four'*
	*tap		tea	*'slap'*
	*chăng		cháng	*'sword'*
	*kăn		kan	*'big, tall'*
	*ùm		uam	*'to winnow'*
	*mon		múan	*'nephew, niece'*
	*nŭng		nông	*'goose'*

PNB	*nhìn	Sdg	nhen	*'clearly'*
	*ngŏk		ngo	*'mountain'*
	*soq		xo	*'get'*
	*srŏk		so	*'body louse'*
	*hăk		hea	*'vomit'*
	*wìh		veh	*'return'*
	*lem		lém	*'good'*
	*rut		rôe	*'buy'*

In addition, however, Sedang voiceless stops have derived from PNB voiced stops and preglottalised voiced stops.

PNB	*bong	Sdg	póang	*'casket'*
	*qbok		poa	*'grandfather'*
	*dĕng		tíng	*'little finger'*
	*qdùm		tuam	*'ripe, red'*
	*jang		chéang	*'work'*
	*gàng		kang	*'spirit pole'*

Sedang nasals have also derived from PNB preglottalised nasals.

PNB	*qmè	Sdg	mei	*'rain'*
	*qnaw		neó	*'new'*
	*qnhĕt		nha	*'grass'*
	*qngok		ngoa	*'brain'*

And Sedang x also derives from PNB *y and *qy.

PNB	*yang	Sdg	xéang	*'spirit'*
	*qyùng		xuông	*'get up, stand'*

Consonant clusters follow the same patterns: preglottalisation was lost, voiced stops with *-l and *-r became voiceless, voiceless consonant clusters were retained. The one exception to these generalisations is that in bisyllabic words *dr was retained in Sedang though in monosyllabic words *dr merged with *tr.

PNB	*qdring	Sdg	tríang	*'drinking straw'*
	*brĕl		pré	*'peanut'*
	*blèw		plau	*'thigh'*
	*hmaq		hma	*'acquaintance'*
	*kadrì		kơdrai	*'female'*
	*dreng		tríng	*'yellow'*
	*trùh		trôh	*'arrive'*

Consequently three conspicuous holes developed in the Sedang initial consonant system: (1) there were no voiced stops, (2) there were no preglottalised consonants (areal phonology shows that 'j and 'ç are rare

anyway), and (3) there was no y. Chart 6.1 illustrates most of these initial consonant sound shifts. The high frequency of voiceless stops and dr and the low frequency of voiced stops and y in Sedang now, as shown in chapter 4, attest to these mergers.

PNB	Sedang	*Sedang pattern holes*
*p, *b, *'b	p	b, 'b
*t, *d, *'d	t	d, 'd
*ch, *j, *'j	ch	j, ('j)
*k, *g, *xg	k	g, ('g)
*q	glottal stop	
*m, *'m	m	'm
*n, *'n	n	'n
*nh, *'nh	nh	'nh
*ng, *'ng	ng	'ng
*w	v	
*l	l	
*r	r	
*qy, *y, *s	x	y
*sr	s	
*h	h	

Chart 6.1 Proto-North-Bahnaric sources for Sedang initial single consonants (Sedang consonant clusters not included)

These three holes have since been filled. Some voiced stops can be traced to Proto-Hre-Sedang origin (cf. Sdg kơbố, Hr kabô *'who'*; Sdg kơdo, Hr kadoh *'hat'*; Sdg gong, Hr gòng *'outside'*; and Sdg bo, Hr qmok *'window'*; Sdg bấu, Hr qmaw *'field rice'*) but most have entered the language in words not yet traceable. Preglottalisation is also returning to Sedang under the influence of areal phonology in loan words from several languages. y, apparently the most recent phoneme to enter the language, is traceable to loans from Bahnar (yang, bơyang *'God'*, yoh '(sentence final particle)'), Vietnamese (ya 'dạ *'exclamation'*; yep *'sandal'*), and French (mơyô *'T-shirt'*).

Vowel plus final-consonant clusters

PNB, like most of the North Bahnaric languages today but unlike Sedang, had a two-register system in which tense register (TR) vowels were clear and "normal" and the lax register (LR) vowels breathy. The register system of Sedang has become relatively more tense in that the former clear TR vowels became laryngealised, and the former (relaxed) breathy LR vowels became clear. (Two intermediate register stages are described below.)

In addition to fourteen final consonants like the Sedang final consonant system shown in Chart 4.14 (section 4.3), PNB also had palatal finals *-ch and *-nh; the PNB finals *-l and *-r were distinctly separate phonemes. There is an exact correspondence between PNB final nasals of both registers and Sedang final nasals (except that for *-nh Sedang has -n after back vowels, -ng elsewhere).

LR:	PNB	*plàm	Sdg	pliam	*'leech'*
		*khìn		khên	*'dare'*
		*qdùnh		ton	*'long time'*
		*plình		pleng	*'sky'*
		*kùng		kông	*'steps'*
TR:		*maham		mơhéam	*'blood'*
		*kapĕn		kơpén	*'loincloth'*
		*tanh		tén	*'weave'*
		*manĕnh		mơnéng	*'crossbow'*
		*măng		máng	*'night'*

This is the extent of exact correspondence, however, between PNB and Sedang final consonants because of the influence of the register system and drastic consonant reduction. Sedang retained final voiceless stops in syllables of the LR (except that for *-ch Sedang has -k after front vowels, and -t after back vowels) but lost them (i.e. they merged with open syllables) in syllables of the TR which syllables then became LR open syllables (*-ch developed a Sedang -i diphthong after back vowels); that is, the clear TR PNB vowels followed by voiceless stops retained their clear quality but switched registers doing so to become clear LR Sedang vowels instead of retaining their register identification and becoming laryngealised.

LR:	PNB	*ăp	Sdg	ap	*'cook'*
		*mŭt		mot	*'enter'*
		*hùch		hut	*'suck'*
		*klèch		klek	*'deaf'*
		*qnhìk		'nêk	*'hoe'*

TR:	PNB	*katăp	Sdg	kơta	*'egg'*
		*măt		ma	*'eye'*
		*hmuch		hmui	*'ant'*
		*tĕch		tê	*'sell'*
		*qdak		tea	*'water'*

Syllables with final *-h developed similarly: Sedang retained *-h in LR syllables but lost it in TR syllables where the vowel remained clear (though sometimes became diphthongised with -i or -u) and switched to the LR.

LR:	PNB	*tapàh	Sdg	tơpah	*'seven'*
TR:		*pah		pa	*'chop'*
		*peh		pei	*'pound rice'*
		*kachuh		kơchôu	*'spit'*

The register contrast of PNB syllables with final glottal stop has been lost, with the former LR syllables generally developing diphthongs with -i or -u in Sedang, and the former TR syllables becoming simple vowels or -u diphthongs also of the LR in Sedang.

LR:	PNB	*ta-ạq	Sdg	tơ-ò	*'burp'*
		*jìq		chai	*'sick'*
		*kamòq		kơmôu	*'dirty'*
TR:		*krăq		kra	*'old'*
		*uq		ôu	*'drink'*

PNB diphthongs with *-w and *-y retain the register contrast in Sedang. Some *-w developed the Sedang back glides and some *-y were lost; elsewise both diphthong types are retained in Sedang.

LR:	PNB	*pajàw	Sdg	pơchau	*'shaman'*
		*phìw		phiô	*'happy'*
		*badày		pơtê	*'rest'*
		*plèy		plai	*'fruit'*
TR:		*chăw		chấu	*'grandchild'*
		*palew		pơleố	*'bulbul'*
		*khĕy		khế	*'moon, month'*
		*juy		chới	*'deer'*

The PNB complex finals *-yq and *-yh developed in Sedang in comparable manner as their components. Both TR and LR *-yq have become Sedang LR diphthongs with -i because of the effect of final glottal causing a merger of the two registers. LR *-yh has become Sedang LR -h except after *u where the *-yh is retained. TR *-yh has become a Sedang LR

diphthong with -i like, as noted above, TR syllables with *-h have lost the -h and switched registers.

LR:	PNB	*lùyq	Sdg	loi	*'believe'*
		*qbàyh		pah	*'snake'*
		*mùyh		muih	*'slash field'*
TR:		*kuyh		kukui	*'back of head'*
		*poyh		pui	*'calf of leg'*

The register contrast of PNB syllables with final *-l and *-r has been retained in Sedang, though the final consonants themselves have been lost completely except that for *-l Sedang has a -u reflex after back vowels.

LR:	PNB	*jǐl	Sdg	chi	*'deer'*
		*(q)bŭl		pôu	*'be drunk'*
		*chìr		chia	*'dig'*
TR:		*apăl		pó	*'mortar'*
		*kul		kŏu	*'to bark'*
		*qbar		péa	*'two'*

PNB open syllable vowels of the LR have developed -i and -u diphthongs in Sedang whereas those of the TR have developed the diphthongs in some cases and remained simple vowels in others. The register contrast is retained throughout.

LR:	PNB	*brì	Sdg	prai	*'wild'*
		*krò		krôu	*'cry'*
TR:		*phe		phái	*'husked rice'*
		*hla		hlá	*'leaf'*
		*tamo		hmŏu	*'stone'*

Chart 6.2 illustrates the various register and final consonant shifts from PNB to Sedang.

The Sedang final consonant system thus developed a number of structural holes: no palatal stop or nasal; no stops or -h in TR syllables; no complex finals (-ih, -ĭ), glottal stop, -l, or -r in either register. Four of these holes are now being filled by loan words but only in the LR; their frequencies of occurrence are the very lowest attesting to their recent introduction: V̆, Vl, Vr, and Vĭ. These loans are mostly from neighbouring languages which retained these finals from PNB.

The development of the Sedang register system from PNB requires two intermediate three-register (howbeit phonetic, not phonemic register) stages. (Three phonetic register contrasts within two register systems have been reported in Brŭ by Miller (in personal discussion) and Todrah (Gregerson and Smith 1973).)

"This is necessitated by the observation that (1) if S(edang) had lost the tense register stops before the tense register open syllable vowel became laryngealized, then the vowels before those lost stops would have become laryngealized in S – but they are clear. Likewise (2) if the lax register stops had become clear before the tense register stops were lost, then all stops would have been lost – but the lax register stops have been retained. Therefore at an intermediate stage there necessarily had to be (1) open-syllable laryngealized vowels, (2) clear vowels with stops, and (3) breathy vowels with stops." (Smith 1972:16)

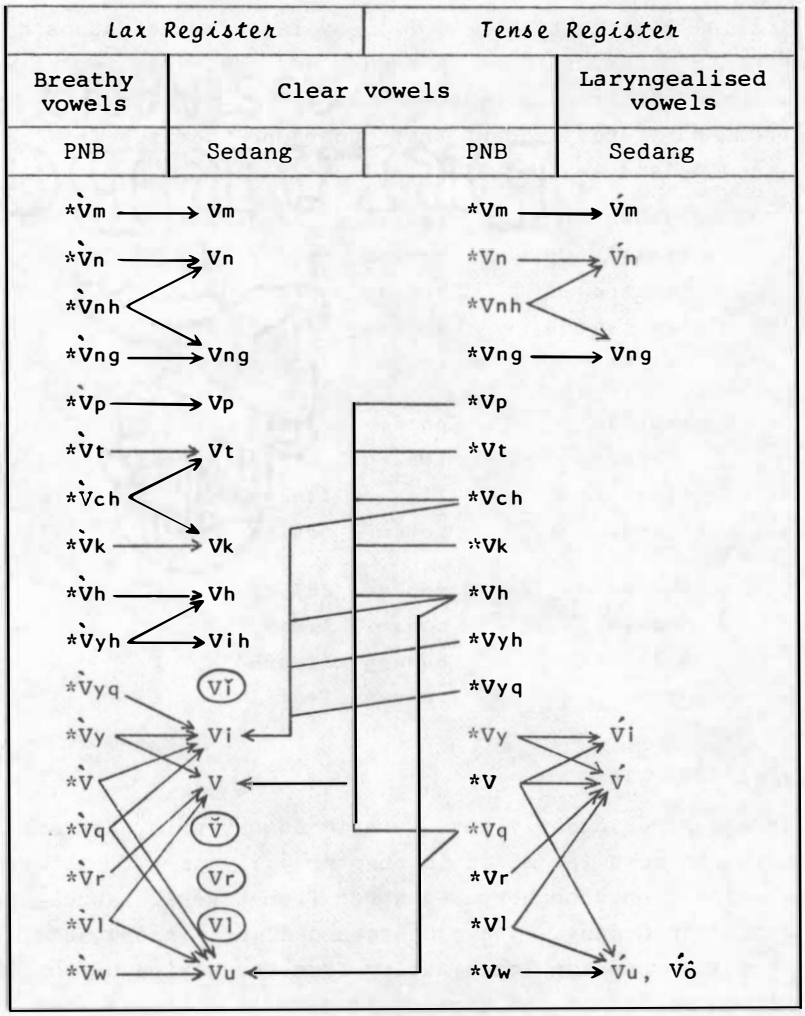


Chart 6.2 Sound changes of vowel plus final-consonant cluster of both registers from PNB to Sedang (adopted and expanded from Gregerson and Smith (1973:162)) (circled items indicate holes in the Sedang phonemic pattern after this development from PNB but subsequently being filled)

Specific vowel correspondences between PNB and Sedang are difficult to state apart from the specific cluster, in that most vowel correspondences are affected by register and/or final consonant. A generalisation, however, can be noted regarding vowel length contrast. Sedang does not have vowel length contrast as reconstructed in PNB. Sedang glided vowels reflect PNB long vowels and PNB short vowels never have glided reflexes in Sedang; but some PNB long vowels may be unglided in Sedang.

Presyllables

Like initial consonants, the PNB presyllable voiced stops have voiceless consonant correspondences in Sedang and *cha- has merged with *ta- and *ka-. Otherwise the correspondences are equivalent (i.e. Sdg pơ- derives from *pa-, etc.) except that Sedang hơ- derives from both *ha- and *sa-, and Sedang i- from *ja-.

PNB		Sdg		
	*pagang		pơkéang	*'medicine'*
	*tamam		tơméam	*'things'*
	*chatrȁw		tơtrau	*'pigeon'*
	*chapang		kơpéang	*'palm (hand)'*
	*kasòm		kơxôm	*'lizard'*
	*baqdăm		pơtám	*'five'*
	*daqbăng		tơpáng	*'bamboo sprouts'*
	*jala		ilá	*'thornbush'*
	*gaqdim		kơtém	*'onion'*
	*maham		mơhéam	*'blood'*
	*hanăm		hơnám	*'year'*
	*sanĕnh		hơnéng	*'tooth'*
	*ramun		rơmúan	*'soft'*

6.2 *LEXICAL BORROWING*

Many Sedang words clearly have genetic cognates in, for example, Bahnar and Vietnamese (as shown in chapter 3). Apart from these, however, there are loaned or borrowed words from several languages of varying depths in Sedang. The oldest, and almost inscrutable, are Sanskrit and Austronesian loans dating from the period of the Indianised Champa kingdom period of the first millenium AD. French loans date from the hundred year period of French colonisation of the 19th and 20th centuries. There are Vietnamese and Bahnar loans from recent decades and English loans from the period of the American involvement in the Vietnam war.

Sanskrit

Sanskrit loans in the Vietnam Mon-Khmer languages were probably introduced through the Chamic languages which had the direct contact with the coastal Indian colonisers on the one hand as well as with the Mon-Khmer tribal peoples of the mountain areas on the other hand. These loans are too few to permit anything more than speculation at this time. Thomas and Headley (1970:408) cite "a few (6) possible Sanskrit resemblances" for Mon-Khmer words in their study, four of which have Sedang cognates:

Skt	phala *'fruit'*	Sdg	plai *'fruit'*
	asva *'horse'*		xei *'horse'*
	manusya *'man'*		mɔngé *'person'*
	udaka *'water'*		tea *'water'* (cf. PNB *dak *'water'*)

The Vietnamese are known throughout much of Southeast Asia by a term like yuan (PNB *yun, Sdg xúan) which some relate to Skt yavana *'stranger, Greek'*. Thomas (1974) disputes this, speculating upon a Chinese yueh origin.

Headley (1976) includes the following two words which may have an Austronesian rather than Sanskrit origin.

Skt	karpasa *'cotton'*	Sdg	kɔpei *'kapok'*
	jāla *'net'*		chéa *'fish net'*

Other Sanskrit linguistic influence noted in the Vietnam languages has been surveyed (Smith 1974c); the following Sedang words are a few of those which seem to be related.

Skt	pati *'master, lord'*	Sdg	pɔtáu *'king'*
	jan *'grow'*		chiang *'to become'*
	dārāḥ *'wife'*		drôh *'unmarried girl'*
	pura *'town'*		pɔlê *'village'*
	víseṣa *'eminence'*		pɔxeh *'supernatural'*
	brahma *'a (celibate) student'*		rɔtám *'bachelor'*
	ratha *'wagon'*		rɔta tá *'to encircle'*
	upakāra *'service, favour'*		pɔkua *'to rule'*
	kapala *'skull'*		ko *'head'* (cf. PNB *xgal)
	putrī *'daughter'*		kɔdrai *'female'*
	kalinga *'Indian' (area now called Orissa)*		kliáng *'an unknown land'*
	pūjā *'worship, offering'*		pɔchau *'shaman'*

Chamic

The Chamic (Austronesian, Malayo-Polynesian) people of Vietnam have doubtless been in contact with the mountain Mon-Khmer peoples since their arrival on the coast of Vietnam. They have forced a wedge between the Bahnaric people so that Bahnar and the southern tier of the North Bahnaric language groups (Hrê, Rengao, Halang) are in contact with the Haroi and Jơrai (Chamic) people in the central highlands from QuiNhon to PleiKu and KonTum. It is sometimes difficult to trace the origin of resemblances found in the two language groups. Those with probable Chamic origin borrowed by the Mon-Khmer peoples as listed by Headley (1976) and present in Sedang include the following (the Proto-Chamic (PC) forms are from Lee (1966)):

PC	*truh *'arrive'*	Sdg	trôh *'approach'*
	*jurŭm *'needle'*		truam *'needle'*

On the other hand, among the seventy-two words listed by Headley as having probable Mon-Khmer or Austroasiatic origin – though this is by no means certain – and with Sedang cognates are the following:

PC	*jōng *'axe'*	Sdg	chuông *'axe'*
	*rŏng *'back'*		rớng *'back'*
	*cagəu *'bear'*		rơkớu *'bear'*
	*čĭm *'bird'*		chêm *'bird'*
	*kang *'chin'*		kéang *'chin'*
	*kruai? *'citrus'*		krui *'citrus'*
	*eh *'to defecate'*		eak *'to defecate, dung'*
	*sagor *'drum'*		hơka *'drum'*
	*ruai *'fly'*		rới *'fly'*
Jơrai	kơdim *'onion'*		kơtém *'onion'*
PC	*bube *'goat'*		pupái *'goat'*
	*hang *'peppery hot'*		háng *'peppery hot'*
	*kalang *'kite, eagle'*		kléang *'eagle'*
	*sula *'leaf'*		hlá *'leaf'*
	*plūm *'forest leech'*		pliam *'leech'*
	*kamuãn *'nephew'*		múan *'nephew, niece'*
	*(a)ha *'open mouth'*		há *'open mouth'*
	*hŭ̃ng *'papaya'*		rơhung *'papaya'*
	*lumãh *'rhinoceros'*		rơmê *'rhinoceros'*
	*blah *'to fight'*		tơpla *'to fight, war'*
	*bala *'tusk'*		pơlá *'tusk'*
	*čih *'write'*		chêh *'write'*

Other words of "uncertain origin" listed by Headley which have resemblances in Sedang include:

PC	*kubau *'buffalo'*	Sdg	kɤpôu *'buffalo'*
	*mata *'eye'*		ma *'eye'*
	*amah *'gold'*		mea *'gold'*
	*phau *'gun'*		phấu *'gun'*

Aymonier and Cabaton (1906) in their Cham-French dictionary include references to Mon-Khmer languages, including Sedang and Bahnar, in their lexical entries indicating the extensive cross-cultural contact which they recognised. Some of the resemblances which they indicated, not listed above, include:

Cham	pluk *'canoe'*	Sdg	plong *'canoe'*
	mrɤng *'black'*		prấng *'black'*
	ribău *'thousand'*		rɤpau *'thousand'*

French

The first French contact with the Sedang occurred following the entrance of French missionaries into the highlands at Kontum about 1851. Subsequently government and military outposts were established. French loans in Sedang testify to these areas of French influence: western articles, food, government, and military terms. Among them are the following which, it can be noted, do not hesitate to utilise the less frequent phonological features, such as presyllable bɤ-, initial voiced and preglottalised stops.

Fr	ballon *'ball'*	Sdg	bɤlong, bɤ'long *'ball'*
	béret *'beret'*		bɤrê, brê, pɤrê *'hat'*
	bureau *'office'*		bɤrô *'office'*
	boîte *'can'*		'buat *'canned food'*
	salade *'salad'*		hɤlat, xɤlat *'lettuce'*
	canon *'artillery'*		kɤnong *'artillery'*
	café *'coffee'*		kɤphế *'coffee'*
	la carte *'map'*		lɤgat *'map'*
	maillot *'T-shirt'*		mɤyo *'T-shirt'* (cf. VN may ô)
	bateau *'boat'*		pɤtôu *'boat'*
	français *'French'*		prang *'French'*
	radio *'radio'*		rɤdiô *'radio'*
	tomate *'tomato'*		tɤmat *'tomato'*
	sac *'bag'*		xak *'bag'*
	sou *'penny'*		xu *'penny'*
	soupe *'soup'*		xup *'soup'*
	zéro *'zero'*		xɤrô *'zero'*

Vietnamese

With the diminution of French influence, the Vietnamese established governmental, military, and economic predominance in the Sedang area with concurrent linguistic influence in the Sedang lexicon. As with French loans, the Vietnamese loans also utilise voiced stops and preglottalised consonants, yet there is conformity to Sedang phonology. Vietnamese tones are not carried over except that Vietnamese hỏi and ngã tones usually are reflected by Sedang final -h, and Vietnamese sắc tone becomes glottalised; Vietnamese general classifier for objects cái is usually reflected by bisyllabic words with presyllable kơ- (cf. 12.5). Vietnamese loans are too many to list here, but include the following:

VN	Sdg
bái *'lesson'*	'bái *'lesson'*
bị *'marble'*	'bi *'marble'*
chấm *'period'*	cham *'period, dot'*
chữ *'letter'*	chu *'letter'*
gác *'guard'*	gak, kak *'to guard'*
gạch *'brick'*	gat *'brick'*
học *'study'*	hòk *'study'*
khăn *'towel'*	ken *'towel'*
gởi cái thơ/thư *'to mail a letter'*	kôih kơthô *'to mail a letter'*
xà-bông *'soap'*	kơbóng *'soap'* (cf. Fr. savon)
cái bàn *'table'*	kơ'bang *'table'*
cái hộp *'small can'*	kơhôp *'small can'*
cái ly *'a glass'*	kơli *'a glass'*
cái máy *'machine'*	kơmaĭ *'machine'*
cái tủ *'cupboard'*	kơtu, kơtuh *'cupboard'*
cái số *'number'*	kơxŏ *'number'*
cao su *'rubber'*	kơxu *'rubber'* (cf. Fr. caoutchouc)
làng *'village'*	lang, léang *'village'*
mỹ *'America(n)'*	mih *'America(n)'*
phố *'downtown'*	phŏ, phóng *'downtown'*
trường *'school'*	trung *'school'*
ủi *'to iron, grade'*	uih *'to iron'*

Bahnar

Bahnar influence in the Sedang area may extend further back than either the French or Vietnamese. Bahnar loans must be distinguished from the much greater number of Bahnar cognates in Sedang. There are three clues to distinguishing Bahnar loans from the cognates:

(1) Bahnar loans are used for modern articles not contemporaneous with the PNB period:

Sdg mrá̋ng *'chalk'*

(2) Bahnar loans have different cognate forms in Sedang:

Bahnar loan –	Bahnar cognate –
Sdg dak *'village name designator'*	tea *'water'*
kon *'village name designator'*	kŭ̋an *'child'*
mɔnê, bɔnê *'to thank'*	mɔna *'to thank'*
yang, bɔyang *'God'*	xé̋ang *'spirit'*

(3) Bahnar loans utilise Sedang phonemes not derivable from PNB:

Sdg brot *'robber'*
'bok *'honorific title'*
di *'honorific pronoun'*
duk *'boat'*
glaih *'hailstone'*
mɔdok *'to teach'*
pĕ '(imperative form)'
rɔbot *'to memorise'*

English

The American involvement in the war during the 1960s enabled Sedang men to serve with the American Special Forces. Frequently their families lived with the soldiers in the military camps. Thus English loans have entered Sedang in areas of military terminology and names of other western materialism which the US soldiers took with them. Such loans are too recent to be catalogued with the assurance that they are not just part of a dying montagnard English pidgin.

PART THREE: SEDANG SYNTAX

INTRODUCTION TO PART THREE

The syntactic analysis of this Part is basically tagmemic, with insights gained from Pike (1967), Pike and Pike (1977), Longacre (1964), Cook (1969), and others. Formulas (or charts where such seem more illustrative) are given for phrase and clause constructions; the latter are in the tradition of Elson and Pickett (1960) – the two-cell tagmeme – although the text accompanying the formulas specifies role (actor, scope, undergoer, locative, etc.) suggesting the four-cell tagmeme of Pike and Pike. Transformations are used to describe variations of clause types. Patterning and structure are primary in the determination of grammatical categories rather than meaning or semantics; the latter is specified if there is an evident correspondence. (For a description of a related language – Rengao – in which semantic categories are given priority over formal syntactic categories see Gregerson (1971).)

Primary emphasis in this description is given to clause structure. Clauses fill sentence level slots and consist of nuclear and, optionally, peripheral elements. Nuclear elements are the more independent part of the construction whereas the peripheral elements are the dependent part. The former include the subject, predicate, indirect object, and (direct) object slots which determine the basic clause types described in chapter 9. The latter include the prenuclear temporal slot and the postnuclear locative, adverbial, and final particle slots described in chapter 10. Variations of the basic clause types (chapter 11) entail permutations of word order of both nuclear and peripheral elements and transformations of the basic clauses. The lower hierarchical elements which fill clause level slots are the noun phrase (chapter 7) and verb phrase (chapter 8).

Various other aspects of Sedang word- or clause-level syntax are given in chapter 12. Six (complex) sentence types are included in the

last chapter. Analysis of paragraph and discourse structure is beyond the scope of this description.

Throughout this Part syntactic units are described, restated in formula form (sometimes in chart form) and illustrated. Word classes are established and their membership suggested; for the smaller word classes all known members are listed whereas for the larger classes only a token sample is presented. There are a few function words which are assigned to more than one word class creating an overlapping of word classes – perhaps these are homonyms? Cross-references make explicit such overlapping. All examples are glossed and their syntactic structure stated. A slash in a Sedang example separates alternate (sometimes dialectal) variants of the word (e.g. 'báng/'máng). In glosses of single words commas are used to separate alternate English equivalents and colons are used to separate literal and idiomatic equivalents. In glosses of phrases, clauses and sentences, parentheses are used both (1) for supplying the content of Sedang words omitted by ellipsis and (2) for clarification. In the brief syntactic statement supplied following each example abbreviations are used for which see Table of Abbreviations which, in turn, identifies the chapter and section where each item is defined. In the earlier chapters to illustrate some contained or embedded units a syntactic structure may be used which has not yet been introduced. In the syntactic statement the nuclear elements are subsumed under the basic clause type and its variations; peripheral elements are given in order, separated by commas; syntactic slots are separated from their fillers (when specified) by colons; clauses and (complex) sentences are enclosed within parentheses; repeated elements are enclosed in parentheses followed by "x2", "x3", etc. Included parentheses not preceded by comma or colon indicate a subordinated or embedded clause. In chapters 7 and 8, before clause structure is discussed, included parentheses sometimes contain only a syntactic amplification of the preceding term. Any example without a syntactic description is syntactically identical to the previous example or statement.

Parallel to the computational emphasis of Part II, throughout this Part statistics are provided to indicate the relative frequency of the various syntactic units in natural text. Two different bases are used. For indicating the frequency of specific words or short phrases a 27,437-word collection of discourses, narratives, etc. is used for which a word concordance had been prepared (see Acknowledgements). For indicating the frequency of specific phrase or clause types a shorter sample of this collection – 765 clauses – is used for which an exacting analysis was made. Examples, however, are also drawn from the larger

reservoir of language material available in the author's notes, dictionary, and vernacular publications (see Bibliography).

7. NOUN PHRASES

7.0 *INTRODUCTION*

Noun phrases (NP) are syntactic units composed of one or more words with, potentially (i.e. barring only ellipsis (12.9)), a noun as head and are used semantically to denote actor, recipient, beneficiary, goal, means, location, etc. Noun phrases are used for the nuclear subject, (direct) object, indirect object, locative, and complement elements of clauses (see chapter 9) and for the peripheral temporal, locative, and adverbial clause elements (see chapter 10).

This chapter describes the five types of Sedang noun phrases. In both the basic noun phrase (7.1) and the pronoun reference phrase (7.4) the noun phrase head occurs phrase initial. The latter is an expansion of pronouns, an element of the former. In all other noun phrases an element of the noun phrase – and that for which the phrase is named – occurs before the noun phrase head: a number in the count noun phrase (7.2), a plural marker in the pluralised noun phrase (7.3), and a preposition in the prepositional phrase (7.5).

After the description of each noun phrase and the introduction of each word class occurring therein, there is a further discussion of each word class.

Apposition, or expansion of the noun phrase, is treated as a clause level phenomenon (12.7).

7.1 *BASIC NOUN PHRASE*

The basic noun phrase (bNP) may consist of a sole noun phrase head (NPH), being either a noun (N), a personal name (PName), or a pronoun (Pron).

kɔta *'egg'* (N)
hngei *'house'*
nôu *'mother'*
A-Piá *'A-Pia (a story princess)'* (PName)
gá *'he, she, it'* (Pron)

In the basic noun phrase the noun phrase head is always phrase initial. A noun phrase head noun may be modified by a second and, infrequently, a third (descriptive or modifying) noun.

kɔta í *'egg-chicken: chicken egg'* (N N)
mɔnat hngei *'wall-house: house wall'*

ing bo cheáng *'side-opening-gate: the gate side (of village)'* (N N N); in I-C analysis the relationship would be (N(N(N)))

A noun phrase head noun, whether or not followed by a second or third descriptive noun, may be modified by any of the following:

(1) a personal name to identify a specific animate being;

rơtám Preáng *'youth Preang (a story prince)'* (N PName)

kia Neak *'ghost Neak (a story ghost)'*

nôu A-Jok *'mother (of) A-Jok'* (parents are named by any of their children's names)

pa o Pim *'father-child-Pim: father of child Pim'* (N N PName); in I-C analysis the relationship would be (N(N(PName)))

(2) a personal name or pronoun (or pronoun reference phrase (PRefP, 7.4)) to indicate personal relationship;

báu Pơ-ông *'Po-ong's rice'* (N PName)

pơlê gá *'his village'* (N Pron)

kúan á *'my child'*

hngei vai tơmối *'the strangers' house'* (N PRefP)

(3) a geographical name (GName) to identify a designated geographic feature;

Kong Xúan *'Vietnamese land'* (N GName)

Váng Poa *'Poa Pass'*

Tea Pơxái *'Poxai River'*

Ngo Éang *'Eang Mountain'*

(4) a descriptive name (DName) to specify a specific rather than a generic item;

klá treáng 'treang *tiger: leopard'* (N DName)

chêm hlum 'hlum *bird: Kingfisher'*

lóang plai trai *'banyan fruit tree'* (N N DName)

chêm lóang plai trai *'banyan fruit tree bird'* (N N N DName)

or (5) a verbal descriptive (vDes), being a main verb (Vb) or verbal adjective (vAdj) (see below).

mơngế 'mei *'evil person'* (N Adj)

kia kôk *'crazy ghost'*

'bok xối *'sacrificing westerner: priest'* (N Vb)

Any of the preceding varieties of the basic noun phrase may be followed (1) by the relative particle (RelPt) ki plus an embedded clause (CL), noun phrase, demonstrative (Dem), or number (Num) (ki Num is an ordinal number; see 7.2 for Numbers), or (2) by a prepositional phrase (PrepP) (see 7.5). The nominaliser tơdróang *'thing, matter, problem'* frequently does not have ki before a clause or noun phrase. ki may be elided before clauses. Neither relative clauses nor prepositional phrases have been observed iterated in this construction.

tritrôu ki á̋i mòng *'mosquito which has a beak'* (N ki T CL)
pơkéang ki chiang xiam kơla *'powder which becomes a bamboo clump'* (N ki Eq3 CL)
lóang ki gá̋ ko nah *'tree which he chopped yesterday'* (N ki T CL)
lóang ki kak *'wood which dried: dried wood'* (N ki Eql CL)
kléang ki ê *'another eagle'* (N ki Eql CL)
péang ki hlá̋ *'the side with leaves'* (N ki N)
kia ki me *'that ghost'* (N ki Dem)
hà̀i ki môi *'the first day'* (N ki Num)
tơdróang á̋ 'nai *'the things I know'* (tơdróang CL)
tơdróang kong kliáng *'the matter of Kliang land'* (tơdróang NP)
tiú gá̋ mot tung tơnei *'the place he entered the earth'* (N CL)
pú tung pơlê *'friends in the village'* (N PrepP)

The relative particle ki is the eighth most frequent word in the 27,437-word text, occurring 404 times; and ki me is the eighth most frequent two-word sequence in text occurring 76 times.

Further, any of the above varieties of the basic noun phrase may be followed by a demonstrative (Dem), locative (Loc), temporal demonstrative (TempDem, 10.1), or, if the noun phrase is non-specific, by a nominal interrogative (NomInter).

tea mih me *'that Mih River'* (N GName Dem)
kú̋an gá̋ me *'that child of his'* (N Pron Dem)
'bok xố̋i me *'that priest'* (N Vb Dem)
Préang me *'that Preang'* (PName Dem)
hà̀i tá̋ *'that day'* (N Dem)
á̋ kố̋ *'I myself'* (Pron Dem)
kia ki ê kố̋ *'this other ghost'* (N ki CL:(vAdj) Dem)
chiak cham *'the field down there'* (N Loc)
kong xú̋an tai *'the Vietnamese country up there'* (N GName Loc)
dôh eh cham *'your son-in-law down there'* (N Pron Loc)
kong pin nah *'our country formerly'* (N Pron TempDem)

The basic noun phrase may thus be summarised as in Chart 7.1.

N	-N	-N	PName	-ki- [	-CL
			Pron		-NP
			PRefP		-Dem
			-GName		-Num
			-DName		
			-vDes	-PrepP	

	-Dem
	-Loc
	-TempDem
	-NomInter

Chart 7.1 Basic noun phrase (the basic noun phrase consists of any one or more items in the linear order given, but not more than one item per box; bracketed items cooccur with ki; prehyphenated items are non-initial and optional; at least one non-hyphenated item must necessarily occur)

Nouns

Nouns (N) form a very large class of words, only a few of which are included herein. Most nouns are, like those cited above, mono- or bi-syllabic words; that is, one phonological word. There are also compound nouns and formula nouns which, however phonemically different, function syntactically like all other nouns.

Compound nouns consist of two phonological words. Some compound nouns have a meaning derivable from that of their parts.

nôu pa *'mother-father: parents'*

ja poa *'grandmother-grandfather: grandparents'*

Other compound nouns have a meaning which cannot be derived from their composite parts.

hlá mơ-éa *'leaf-?: paper'*

nhóng o *'elder-younger sibling: relatives'*

kúan kia *'child-ghost: animals'*

on hngei *'fire-house: family'*

Other compound nouns are composed of parts with no known meaning apart from the compound.

bling blea *'an "x" mark'*

Formula nouns group two or four specific items together to represent an entire generic grouping.

pah pǒu *'snake-lizard: formula for all forest creatures'*

ká ket *'fish-frog: formula for all water creatures'*

chu í kơpôu ro *'pig-chicken-buffalo-cow: formula for all domestic animals'*

Sometimes formula nouns form a rhyming pattern in which the second item rhymes with the third, following the general poetic rhyming pattern in which the last word of a line will rhyme with the first word of the following line (or a word near the beginning of the line (12.12; Smith 1973c). Despite their similarity such rhymes are not as common in Sedang as has been reported, for example, in Halang (Cooper 1973).

romóang vaĭ khán jia *'Laotian robe-Jorai cloth-long garment-shawl: formula for all kinds of blankets and robes'*

(Note that the Central Sedang denasolaryngealised form of khán is khaĭ which rhymes with vaĭ; the latter, being a Jorai term, does not have a nasolaryngealised form in Sedang.)

Countable nouns (cN) are discussed in 7.2; animate nouns (anN) in 7.3.

Pronouns

Personal pronouns (Pron) form a small class of words whose semantic system is characterised by singular, dual and plural number, and inclusive and exclusive first person forms, as shown in Chart 7.2, except that there is no dual/plural contrast for the second person category. The apparent incompleteness of the pronominal system at this point corresponds to an aspect of current development of pronominal systems among the North Bahnaric languages in which the forms *bri and *chop have derivatives with varying meanings within the 2nd-3rd person dual and 2nd person dual-plural areas of meaning. The Sedang pó is not cognate with any pronoun of the neighbouring languages (Smith 1974d).

	Singular	*Dual*	*Plural*	
1st P	á	má	ngin	*Excl.*
		pá	pin	*Incl.*
2nd P	eh	pó		
3rd P	gá	préi	vai	

Chart 7.2 Sedang personal pronouns

There are five additional pronouns with other semantic features: the personal interrogative and indefinite pronoun kơbố *'who?, anyone'*, the impersonal interrogative kiklai *'what?'*, the indefinite pronoun 'na *'some(one)'*, and the in-law respect pronouns chuô and kơdrá. chuô is a second person singular pronoun *'you'* used with all in-laws except

brother- and sister-in-laws who use the o/mai reciprocal terms. kơdrá is a third person singular and dual pronoun *'he, she, those two'* used of all married couples if one of them is addressed chuô. (Smith 1974b.)

on kơbố *'whose fire'* (P Pron)

Ái kơbố ôh. *'There isn't anyone.'* (Ex CL:(Ex Vb, Pron), fPt)

Kiklai kơchep á kố. *'What pinched me here?'* (T CL:(Pron, T Vb, Pron), LocP)

'Na khến ìà, 'na khến chúan. *'Some say* ia*; some say* chuan.' ((T CL:(Pron, Q Vb, N))x2)

Chuô rơngei ti me neố. *'You sing like that some more.'* (I CL: (Pron, I Vb), ManP, fPt)

In Smith (1969a:115-22) another description of Sedang pronouns is given utilising a tree-branching diagram and the binary values of the features hearer, speaker, non-singular and non-specific number. This analysis, included in a generative transformational analysis of Sedang affixation, proposed a means for "adding pronouns" as required for the reciprocal prefix tơ- (12.2).

In a 27,437-word text with 1409 different words, three of the five most frequently occurring words are pronouns. One in every twenty words is the pronoun gá. The ten personal pronouns (as shown in chart 7.2) occur 3627 times so that one in every 7-8 words in the text is a pronoun. Chart 7.3 indicates the ranking and frequency of the ten personal pronouns in the large text; this particular ranking, however, results from the context and participant content of the collected texts and would be different if other conversational situations were included.

A study of two-word sequences in that same text indicates that the pronouns gá, vai, á, and pố also occur frequently in certain common syntactic sequences. Chart 7.4 shows ten frequent two-word sequences with pronouns with their frequency and syntactic function. One of every three occurrences (607/1707) of me *'then, that'*, shown below to be the most frequent word in text, occurs contiguous to a pronoun (including those across clause and sentence boundaries); and one of every three occurrences (133/376) of the verbal particle hiáng *'already'* occurs following a pronoun. Of the other function words cited in the chart, 10-20% of their occurrences are contiguous to a pronoun. Only gá me and dei pố are immediate constituents within a phrase; the others are contiguous only as frequent members of contiguous syntactic units on the clause level.

Rank	Pronoun	Frequency
2	gá	1334
3	á	684
5	vai	558
15	eh	306
18	pin	284
30	préi	161
43	pó	127
77	ngin	74
103	má	51
109	pá	48
	TOTAL:	3627

Chart 7.3 Rank (of most frequent words) and frequency (of occurrence) of pronouns in 27,437-word text

Personal names

Sedang personal names (PName) are almost always (99%) monosyllabic. In determining personal names parents avoid both meaningful words and other known names. Personal names thus form a large open class of

Rank	Sequence	Frequency	Syntactic function	Chapter
1	me gá *'then he'*	215	CL: Temp, S:Pron	10
5	gá me *'that he'*	129	NP: Pron, Dem	7
13	me vai *'then they'*	61	CL: Temp, S:Pron	10
14	me. Gá *'that. He'*	60	CL: fPt. S:Pron	10
15	á va *'I want'*	55	CL: S:Pron, VP	9
18	gá hiáng *'he already'*	51	CL: S:Pron, VP	9
20	gá u *'he still'*	49	CL: S:Pron, VP	9
21	á hiáng *'I already'*	49	CL: S:Pron, VP	9
25	kó gá *'now he'*	44	CL: NP/Temp, S:Pron	10
37	dei pó *'together'*	37	RecipP: RecipPt,Pron	11

Chart 7.4 Rank, frequency and syntactic function of common two-word sequences with pronouns in 27,437-word text

words. With the search for unique personal names there is consequently a skewing of the phonological system. The common phonological features of the general vocabulary are rare among personal names, and vice versa. Cf. Smith 1969c.

The use of a prefix I- or A- before names to indicate sex (common among the Jeh, Rade, etc.) is not generally practiced by the Sedang.

Geographical names

Geographical names (GName) are those terms used to identify specific geographic features and do not occur apart from the preceding designator: rivers (Tea... or Dak...), countries (Kong...), mountains (Ngo...), mountain passes (Vá́ng...), and villages. Village names usually begin with one of the following designators (to show relative use of these designators the number in parentheses indicates the number of specific villages known to use the term as included in my Sedang dictionary):

Tea... (or Dak..., a Bahnarism) *'water'* (62)
Kủan... (or Kon..., a Bahnarism) *'child'* (56)
Tu... *'an anthill'* (10)
Mang... *'(?)'* (8)
Vá́ng... *'mountain pass'* (3)
Lôông... *'swamp'* (2)

Village names not utilising one of the above designators include: Jơxia, Kôh Kông, Lang Lá́, Ling Lá́, Momoh, Ngok Hring, Pơlê (*'village'*) Kiă, Rang Rea, Teng Mong, Va Mơná́, Vak Xang, Yang Mơná́.

Descriptive names

Descriptive names (DName) are those terms assigned to things of nature to extend the folk taxonomy from the generic to the specific and form a large class of words. Descriptive names do not occur apart from the noun being described. Descriptive names frequently indicate colour, size, etc., although many have no (recoverable) meaning apart from the specific thing so named. For example, the group of klá́ *'tiger'* includes:

klá́ mơngế́ (mơngế́ *'people'*) *'man-eating tiger'*
klá́ hơnan (hơnan *'sit down'*, is also used as a name for a kind of kơtố́n *'bat'* and a kind of priat *'banana'*)
klá́ tréang (tréang *'?'*, is also used as a name for a kind of nha *'grass'*, chok *'shrew'*, and plai *'fruit'*) *'leopard'*
klá́ chêm (chêm *'bird'*) *'a small tiger'*
klá́ hơnian (hơnian *'contentment'*) *'a tiger'*

Verbal descriptives

A verbal descriptive (vDes) may be any main verb (excluding equative verbs and the existive verb) or a verbal adjective (vAdj). The main verbs are defined and discussed in 8.1, but to illustrate their occurrence as verbal descriptives in noun phrases they will be prematurely introduced here. The most common main verbs in this function are transitive verbs.

ngé tia *'the answering person'* (N, vDes:(Q Vb))
tiú kôm *'waiting place'* (N, vDes:(C Vb))
plai lôi *'abandoned fruit'* (N, vDes:(B Vb))
tróang hơda *'escape trail'* (N, vDes:(S Vb))
báu ka *'eating rice'* (N, vDes:(T Vb))
'bok xối *'sacrificing grandfather: priest'* (Bahnarism)
drôu ôu *'drinking wine'*
hngei 'nhie *'destroyed house'*
tơgông eak *'defecating place'* (N, vDes:(I Vb))

Verbal adjectives are discussed in the next paragraph. Thus verbal descriptives may be formulated as follows (read slash as "or"):

vDes: Q Vb/C Vb/B Vb/S Vb/T Vb/I Vb/vAdj

Verbal adjectives

Verbal adjectives (vAdj) function as verbal descriptives in noun phrases, as predicate complements in equative clauses (9.7), as descriptive phrases (10.3), and as an element of the quantitative particle phrase (10.3). Verbal adjectives form a large class of words. The last word of each of the following phrases is a verbal adjective illustrated here in a noun phrase as a verbal descriptive; each phrase may also be read as an equative clause.

pơlê ache *'near village'*
tơméam be *'enough things'*
hlá bông *'white leaf'*
hme chiú *'burned rice'*
hngei ha *'crowded house'*
chiak hơngé *'distant field'*
rơnó hơngiú *'cold season'*
hmốu kan *'big rock'*
kia kôk *'crazy ghost'*
drôh lém *'beautiful girl'*
to hla *'dead monkey'*
hơnám mơngua *'lacking year: famine'*
mơngé 'mei *'evil person'*

tơméam hngám *'heavy thing'*
chang peng *'full basket'*
mơngế rơtôh *'bad person'*
vó ton *'old jar'*
báu tuam *'ripe rice'*

The word tai *'to be completed, gone'* functions as a verbal adjective in all cases except in the above noun phrase.

Demonstratives

There are three degrees of proximity shown by demonstratives (Dem):

close	kố	*'this, here'*
intermediate	me	*'that'*
distant	tá	*'that'*

The indefinite demonstrative is lai *'any'*.

In the 27,437-word text the word me is the most frequent word, occurring 1707 times or once for every sixteen words. This word was not distinguished in the count, however, for its various functions (cf. Temp me (10.1), fPt me (10.4), ContConj me (13.3), ResConj me (13.5)). The word kố is the fourth most frequent word, occurring 593 times; whereas the Dem tá is ranked 86, occurring only 65 times.

Locatives

Locatives (Loc) are used to express geographical location and form semantic pairs. The locatives include:

cham *'down there, downstream, south'* and
tai *'up there, upstream, north'*;
hơdrối *'before, in front of'* and
kơ'nai *'behind, after, in back of'*;
'nai *'down low, ground level'* and
'ngei *'up high, sky level'*;
pêng *'above, on top of'* and
xuap *'below'* as well as
kơdam *'underneath'*.

Two locatives may occur together, as in:

Gá heố lóang a 'ngei tai. *'He climbed the tree way up high.'*
(T CL, LocP:(Prep, Loc, Loc))

Nominal interrogatives

There are three nominal interrogatives (NomInter) which are used in noun phrases.

lai *'which?, what?'*
klai *'which?, what?'*
kiklai *'which?, what?'*

u lai *'where?'*
tróang lai *'which path?. what path?'*
kɔnṓu klai *'which man?, what man?'*
kong kiklai *'which country?, what country?'*

7.2 *COUNT NOUN PHRASE*

The count noun phrase (cNP) is used when indicating a specific quantity. A number (Num) is phrase initial and, except in special cases of ellipsis (see 12.9), must be followed by either a classifier (Cl) or countable noun (cN) which does not require a classifier. The head noun categorised by the classifier follows the classifier but, in the simple count noun phrase, is usually elided if the context has already implied it.

môi to ket *'one frog'* (Num Cl N)
pún ngế rɔtám *'four young men'*
péa to *'two (something)'* (Num Cl)
pái ngế *'three beings'*
pɔtám lián *'five piastres'* (Num cN)

The head noun of the count noun phrase is, in essence, the head noun of a basic noun phrase and may be modified by following modifiers as described in 7.1.

pái rɔnó kɔxái rái *'three pieces of rattan vine'* (Num Cl N N)
môi ngế A-Pia me *'that one person A-Pia'* (Num Cl PName Dem)
môi pɔléang ráng gá me *'his one arrow'* (Num Cl N Pron Dem)
môi to ket dro *'one* dro *frog'* (Num Cl N DName)
môi xu khei *'one red cent'* (Num cN vAdj)

The count noun phrase may be summarised as in Chart 7.5.

Num	-Cl	(-bNP(NPH:N))
		-bNP(NPH:cN)

Chart 7.5 Count noun phrase (the count noun phrase consists of either horizontal reading with the outer-bracketed element optional, or the inner-bracketed items specifying restrictive filler requirement)

Numbers

The basic numbers (Num) form a decimal system.

môi *'one'*
péa *'two'*
pái *'three'*
pún *'four'*
pɔtám *'five'*
tɔdrɔ́u *'six'*
tɔpah *'seven'*
tɔhéam *'eight'*
tɔchên *'nine'*

There are four *number multipliers* (Mult) which follow the basic numbers and by which they are multiplied:

chat *'tens'*
  môi chat *'10'* (Num x Mult)
  péa chat pái *'23'* (Num x Mult + Num)
hríng *'hundreds'*
  pún hríng *'400'* (Num x Mult)
  pɔtám hríng tɔdrɔ́u chat tɔpah *'567'* (Num x Mult + Num x Mult + Num)
rɔpau *'thousands'*
  tɔhéam rɔpau *'8000'* (Num x Mult)
  môi chat péa rɔpau tɔchên hríng pái chat pɔtám *'12,935'* ((Num x Mult + Num) x Mult + Num x Mult + Num x Mult + Num)
rɔtuh *'millions ?'*

The numeral interrogative (NumInter) to lai *'how many, how much'* functions as a number,

to lai 'báng chiak *'how many fields'* (Num Cl N)
to lai hríng to hɔnôu *'how many hundred rice houses'* ((NumInter x Mult) Cl N)
to lai hɔnám *'how many years'* (NumInter cN)

The *approximate number* (apNum), consisting of any two successive basic numbers, is used to mean *'several'* and also function as a number. The value of the numbers may suggest the approximate quantity without being specific.

apNum: Num_i Num_{i+1}
  péa pái to ngế *'several (two-three) persons'* (apNum Cl N)
  pún pɔtám púm *'several (four-five) round things'* (apNum Cl)

Ordinal numbers are formed by ki Num; see 7.1 for an example. (Also Smith 1976c.)

Classifiers

Classifiers (Cl) form a modest-sized closed set of words and are required for counting most items. Each classifier is used with a specific (though open) set of words which usually have either shape, size, or function in common. The general classifier to overlaps many of the other classifiers. Some classifiers are also nouns which require some other classifier when used as a noun; cf. kơta. There is also some overlapping within the classifiers; cf. 'nóang and púm which both classify kơta *'egg'*. The classifiers are listed below.

The general classifier:

to classifier for most animals, beings, body parts, baskets, buildings and parts of buildings, geographical features, cháng *'swords'*, kơnep *'scissors'*, etc.

The classifier to occurs without a preceding number if the sense is *'only'* or *'only one'* and, in this case, usually, but not always, with the final particle xo *'only'* (cf. 10.4).

Á va ka to kơnai xo. *'I want to eat rat only.'* (T CL, fPt)

Gá hlo to tíng kơnái. *'He saw a boar tail.'* (T CL w C Vb)

Other classifiers:

buang classifier for blankets and garments: jia, ken, hmôu

'báng/'máng classifier for plots of ground: chlak, poh *'fields'*, déang *'garden'*; also for péam *'fish trap'*

'do classifier for bamboo: kơlá, pơ-ó

hơnông classifier for ear of corn and stalk of bananas

kơmea classifier for clusters of bamboo: pơ-ó

kơpau classifier for garments and nets: rơmóang, khán, duôh, káng, kơpan, pơkhom, na, chiá

kơta classifier for flat things: hlá *'leaves'*, hlá mơ-éa *'sheets of paper'*, chiú *'disks'*, hmốu kơ'deang *'flat stones'*, cheng hleng, kóang *'gongs'*, chuông *'axe'*, kơxiang phá *'shoulder blades'*, tón, kơtúm, díng *'trays'*, xíng *'trays'*; sometimes used for hơdro *'kettles'*.

kơtôu classifier for crabs: kơtéam, asé

kơtốu classifier for pliable things that can be held in the hand like clay, cooked rice

kơvã̂ classifier for hands of bananas

'nóang/nóang classifier for round objects: tu-ua *'squash'*, priat *'bananas'*, hmốu *'stones'*, plai *'fruits'*, hơdro *'small kettles'*, plôi *'gourds'*, kơta *'eggs'*, vó *'jugs'*, 'nhen kôe *'wrapped rice'*

ngế classifier for human-like beings: kúan *'children'*, kơnốu *'men'*, kơdrai *'women'*, rơtám *'boys'*, drôh *'girls'*, kia *'ghosts'*, xéang *'spirits'*, Mih *'Americans'*, nha *'scarecrow'*, etc.

pang classifier for klóng *'sections of bamboo'*

púm classifier for round objects: kơta *'eggs'*, plôi *'(Sedang round) gourds'*, plai *'fruits'*, pián, tu-ua, pốu *'squash'*

pơléang classifier for short stubby things: hơnéng *'teeth'*, ráng *'bullets and quills'*, hơ'ráng *'fingers'*, xak *'hairs'*

pla classifier for rolled up things: duh *'sleeping roll'*, hman *'pants'*

rơno classifier for long, narrow objects: kơpén *'loin cloth'*, rái *'rattan'*, plôi *'(Vietnamese long) gourds'*, pah *'snakes'*, tơkoa, kơxôm *'long lizards'*, oa ngang *'earthworms'*, kau, trua, rơpông, ká trê, etc., various long fish, ning nong *'eels'*

xiam classifier for lóang *'trees'*, vó *'jugs'*, drôu *'rice wine'*

Countable nouns

Countable nouns (cN) are those nouns which do not require a classifier when preceded by a number. Countable nouns belong to several semantic groups of quantity:

(1) Time: hơnám *'year'*, chôu *'hour'*, hài *'day'*, khế *'month'*, máng *'night'*, pơlá máng tíng *'week'*, xei *'afternoon'*, etc.

péa chat hơnám *'twenty years'* ((Num x Mult) cN)

(2) Money: lián *'a piastre'*, kak *'a tenth piastre'*, xu *'a hundredth of a piastre'*

môi hríng lián *'one hundred piastre'* ((Num x Mult) cN)

(3) Parts of wholes: hơdrôh *'verse of song, short time span'*, na *'time, turn'*, pa *'side, half'*, pôe *'piece'*, xôh *'time, turn'*, chúan *'row in field'*

Á neố ối môi hơdrôh. *'I've only lived a short while.'* (I CL, QuanP:(Num cN))

Pin rôe mam môi xôh péa hríng. *'We buy meat one time two hundred (piastres).'* (T CL, QuanP:(Num cN), QuanP:(Num cN))

Klá ka môi pa kơtei gá xo. *'The tiger ate one side of his buttocks only.'* (T CL:(O:cNP), fPt)

(4) Baskets: chang, chea, ró, etc., various sized baskets

(5) Measurements: hơka *'elbow to finger'*, hơtá *'thumb to any finger of same hand'*, kơxỗ *'kilometer'*, kra *'arc length of arms (as in measuring tree trunk)'*, 'nhuang/'nhông *'man's height'*, plei *'finger to finger of outstretched arms'*, xoh *'finger to chest with one outstretched arm'*

A few other nouns may occur without a classifier: hơdro *'kettle'*, hơnôu *'rice house'*, tiú *'place'*.

Gá va pôu péa chang. *'He wants to carry two basketful.'*
(T CL(O:NP:(Num cN)))

7.3 *PLURALISED NOUN PHRASES*

The pluralised noun phrase (plNP) is used to indicate quantities without use of a specific number. The pluralised noun phrase consists of a plural marker followed by a basic noun phrase with or without an intervening classifier, or by a pronoun reference phrase with vai (7.4(6)). There are two kinds of *plural markers* (plM): general and animate.

There are four *general plural markers* (gen-plM): tai tang *'all (of a given set)'*, hen *'many'* (cf. Quan hen (10.3)), túm *'every'*, rem *'each'*, and two compounded emphatic general plural markers túm rem *'each and every'* and túm tai tang *'every last one'*.

tai tang kia *'all ghosts'* (gen-plM N)
tai tang vai *'all of them'* (gen-plM Pron)
hen mơngế drôh *'many girls'* (gen-plM N N)
hen tơdróang *'many problems'* (gen-plM N)
túm kán pơlê *'every village chief'* (gen-plM N N)
túm tơdróang *'all problems, matters'* (gen-plM N)
túm vai kra kơnốu *'all the old men'* (gen-plM PRefP)
rem hài *'each day'* (gen-plM cN)
rem púm *'each round object'* (gen-plM Cl)
túm rem ngế *'each and every person'*
túm tai tang pơlê *'every last village'* (gen-plM N)

Two of these general plural markers, tai tang and hen, may occur after (as well as before) a noun (though not after a longer noun phrase). In the post-noun position a reduplicative emphatic form of hen also occurs: hen hín/hen híng.

kia tai tang *'all the ghosts'*
tơdróang hen *'many problems'*
tơdróang hen hín *'very many problems'*

The *animate plural marker* (an-plM) is mau and is followed by a basic noun phrase whose noun phrase head must be an animate noun (anN) (without a classifier), by ki CL, or by the pronoun reference phrase with vai (7.4(6)).

mau chu léang *'villages chiefs'* (an-plM anN N)
mau rơtéang *'Sedang people'* (an-plM anN)
mau ki chia tơnap *'those who dig graves'* (an-plM ki CL(T CL))
mau vai kra kơnôu *'the male elders'* (an-plM PRefP)

A mau pluralised noun phrase may delimit a preceding noun.

khu mau vai me *'that group of them'* (N plNP:(an-plM, PRefP: (vai Dem)))

The pluralised noun phrase may thus be represented as shown in Chart 7.6.

gen-plM-	-bNP
	-PRefP(Prcn:vai)
an-plM(mau)-	-bNP(NPH:anN)
	-ki CL

Chart 7.6 Pluralised noun phrase (plNP) (the pluralised noun phrase consists of any two elements in horizontally-adjacent boxes; inner-bracketed items specify restrictive filler requirement)

7.4 *PRONOUN REFERENCE PHRASE*

The referent of a third person pronoun or of a third person component of other dual or plural pronouns is made specific in the pronoun reference phrase (PRefP), though the referent may also include the speaker or hearer. The implicit third person component may be clarified and made explicit by a following (noun or) basic noun phrase. The pronoun reference phrase may function as a pronoun in the basic noun phrase. (Cf. Smith 1976b for a discussion of the mechanism of some Sedang pronoun reference across clause and sentence boundaries.)

(1) The pronoun reference phrase with má *'we(excl.) two'* identifies for the hearer with whom the speaker is identifying himself by use of the dual pronoun.

má o *'my younger sibling and I'* (má N)

má pa á *'my father and I'* (má N Pron)

(2) The pronoun reference phrase with ngin *'we(excl.) all'* identifies for the hearer with whom the speaker is identifying himself by use of the plural pronoun.

ngin rɔteáng kɔ́ *'we Sedang people (you are not one)'* (ngin N Dem)

(3) The second person plural pronoun pó *'you all'* may encompass an absent third person party. The third person party may be made explicit with the pronoun reference phrase.

pó dôh *'you and your son-in-law'* (pó N)

(4) The pronoun reference phrase with gá *'he, she, it'* makes explicit the pronoun referent, usually by citing the personal name.

gá kœxet tlua *'he, i.e. Koxet Tlua'* (gá PName)

(5) The pronoun reference phrase with préi *'those two'* identifies, if necessary, the identity of the referents of the dual third person pronoun. There are four forms which this can take. The N which usually occurs in this construction as formulated below may be expanded to simple noun phrases.

(a) préi N if both referents are describable by the same term;
préi cháu *'the two grandchildren'*
préi kœdrai *'the two women'*

(b) préi N N or

(c) préi N préi N or

(d) N préi N if both referents are not describable by the same term.
préi óng meh *'the two brothers-in-law'*
préi poa cháu *'the grandfather and grandchild'*
préi klá prei koa *'the tiger and the turtle'*
préi pa préi kúan *'the father and the child'*
Xôu préi na Xôu *'Xou and Xou's sister'*
pa Xôu préi vá Xôu *'Xou's father and Xou's father-in-law'*
tœdróang préi chó préi mœngé *'the matter of the dog and the person'* (NP:(N PRefP))

(6) The pronoun reference phrase with vai *'they'* identifies the referent of the plural pronoun. In addition to a (noun or) basic noun phrase the referent may be described by a verbal adjective (7.1). Only this pronoun reference phrase may be preceded by the general animate pluraliser mau (7.3).

vai drôh *'the girls'* (vai N)
vai pœlê *'the villagers'*
vai tœmŏi *'the strangers'*
vai ê *'the others'* (vai vAdj)
vai kra *'the elders'*
mau vai rœtám *'the young men'* (plNP:(mau PRefP:(vai N)))
khu mau vai me *'that group of them'* (N plNP:(mau PRefP:(vai Dem)))

7.5 *PREPOSITIONAL PHRASE*

The prepositional phrase (PrepP) is used as a filler of the indirect object (locative) slot of the semitransitive clause (9.4) and of the locative and temporal peripheral slots in other clauses (10.1-2). As stated above (7.1) the prepositional phrase may also be a part of a

basic noun phrase. The prepositional phrase has an initial preposition (Prep) followed by any of the above noun phrases, a demonstrative, or a locative. By ellipsis (12.9) most prepositions may occur without a following noun phrase.

The prepositional phrase may thus be summarised:

PrepP: Prep — bNP/cNP/plNP/PRefP/Dem/Loc

a hngei *'to the house'* (Prep bNP:(N))
'báng á *'with me'* (Prep bNP:(Pron))
'báng môi ngế kơnốu *'with one man'* (Prep cNP:(Num Cl N))
tung tai tang pơlê *'in all the villages'* (Prep plNP:(gen-plM N))
kô vai kơnốu *'vis-a-vis the men'* (Prep PRefP:(vai N))
tung me *'in there'* (Prep Dem)
hing pêng *'the area up above'* (Prep Loc)

Prepositions

The following prepositions (Prep) are used in prepositional phrases:

a *'to, toward'*
'báng *'with'*
dreng *'with'*; cf. TempSub dreng *'while'* (10.1)
dreng eh *'with you'* (Prep Pron)
drô *'in the middle, in the midst'*
drô tróang *'in the path'* (Prep N)
hing/hông *'in the vicinity of'*
hông cham *'the area down below'* (Prep Loc)
kô *'to, in relation to'*; note its use also in SimP and CompP (10.3) and BenP (11.2); cf. fPt kô (10.4)
kơdam *'beneath, below'*
kơdam Kon Hreng *'below Kon Hreng village'* (Prep N GName)
'nang *'diminished to'*
Mot 'nang krang. *'Enter up to the knees.'* (S CL:(S Vb, PrepP:(Prep N)))
pơlá *'between'*
pơlá hài tíng *'between sacrifice days: week'* (Prep N vDes)
pơpêng *'above'*
pơpêng tơnei *'above the ground'* (Prep N)
sap *'from'*
Lám sap Kon Tum. *'Go from Kontum.'* (S CL:(S Vb, PrepP: (Prep N GName)))
ti *'up high in, up high on'*
Gá ói ti lóang. *'It lives up high in the tree.'* (I CL, LocP: (Prep N))

tung *'in, within, into'*

Preǒ tung kong. *'Return into the jungle.'* (S CL:(S Vb, PrepP:(Prep N)))

The preposition kɔdam has a nominal use as in:

Hɔni kɔ'neh tung kɔdam. *'The comb fell in the place underneath.'* (I CL, LocP:(Prep N))

The preposition kô also has a relator use as a relator particle (RelrPt) (1) identifying possession (but also see RelPt ki above (7.1)) and (2) marking (sometimes) indirect objects in clause structure (9.1-2). See also kô with final particles (10.4).

7.6 *DISTRIBUTION AND FREQUENCY OF NOUN PHRASES*

Chart 7.7 lists 81 different noun phrase forms which occur 953 times in the analysed sample of continuous text. Each of these noun phrase forms is included in a noun phrase description above; there are other combinations, however, which are structurally possible (some, but not all, of which have been observed elsewhere) not occurring in this limited sample. The chart indicates the frequency of each phrase type in each of the five clause slots in which noun phrases occur.

Corresponding to the frequency of the various clause types in which they occur, noun phrases occur most often in the subject slot (529 times), less often in the object (254) and locative (136) slots, infrequently in the indirect object and temporal slots. The basic noun phrase contains the greatest variety of forms (41 of 81) and occurs most frequently (85%) in this text sample. Pronouns occur five times more frequently than nouns in the subject slot; whereas nouns occur 2½ times more frequently than pronouns in the object slot. Prepositional phrases are restricted to the locative and temporal slots except for their infrequent occurrence within the basic noun phrase itself. Noun phrases can theoretically be expanded maximally to six or more components; but the eight phrase forms having only one component account for 615 noun phrase occurrences (65%). Twenty-four 2-component phrases account for 232 occurrences; thirty 3-component phrases account for 78 occurrences; seventeen 4-component phrases account for 26 occurrences; and the only two 5-component phrases account for only 2 occurrences. There are no 6-component or larger noun phrases in the sample.

						S	IO	O	LocP	TempP
Basic noun phrase										
N						60	3	105	8	
N	N					2		10	3	
N	N	N	DName					1		
N	N	N			Dem			1		
N	N		PName					1		
N	N		PName		Dem	2				
N	N		Pron			1				
N	N		Pron		Dem	1		4	1	
N	N		DName		Dem	1				
N	N		vDes					1		
N	N		vDes		Dem			1		
N	N				NomInter			1		
N	N				Dem	1		2	5	
N			PName			10		7	2	
N			PName		Dem	4				
N			Pron			13		9		
N			Pron	CL				1		
N			Pron		Dem	6		6		
N			Pron		Loc	1				
N			GName					1		
N			DName			2				
N			vDes			3		6		
N			vDes		Dem			1		
N			vDes	NP	Dem				1	
N			vDes	Prep	NP			2		
N				ki CL		2		2		
N				CL				2		
N				ki CL	Dem			1		
N				ki Dem		2		4		
N					Dem	14	1	15	9	4
N					Loc				2	
N					NomInter			2	4	
N				Prep	N Dem		1			
			PName			6				
			PName		Dem	3		2		

continued

	S	IO	O	LocP	TempP	
Basic noun phrase (continued)						
Pron	364	15	43	1		
Pron ki CL	1					
Pron ki NP	1	1				
Pron Dem	10		10			
Pron Loc		1				
Pron Prep N			1			
Total basic noun phrases	510	22	242	36	4	814
Count noun phrase						
Num Cl	2					
Num Cl N			1			
Num Cl N DName			1			
Num cN		1		1	3	
Num cN Dem				1		
Num...	2					
Total count noun phrases	4	1	2	2	3	12
Pluralised noun phrase						
tai tang N		2				
tai tang...			1			
tú́m N			4			
tú́m N N			1			
tú́m N N Dem			1			
Total pluralised noun phrases		2	7			9
Pronoun reference phrase						
pó́ N	1					
gá́ PName			1			
préi N N	1					
préi N préi N	1					
vai N	5					
vai N Dem			1			
vai Pron Loc		2				
vai N Pron Dem	1					
N pó́ N	1					
N mau vai Dem	1					
Total pronoun reference phrase	11	2	2			15

continued

	S	IO	O	LocP	TempP	
Ellipsis of the noun phrase head						
...GName				1		
...Dem	4		1			
Total instances of ellipsis	4		1	1		6
Prepositional phrase						
Prep...				1		
Prep N				27		
Prep N N				7		
Prep N N N				1		
Prep N N Dem				3		
Prep N Pron				2		
Prep N vDes				2		
Prep N ki CL				1		
Prep N ki CL Dem				1		
Prep N Dem				10		
Prep Pron				6		
Prep Pron Dem				1		
Prep má N				1		
Prep vai N ki CL				1		
Prep mau ki CL				1		
Prep Dem				24		
Prep Loc				8		
Total prepositional phrases				97		97
Total all noun phrases	529	27	254	136	7	953

Chart 7.7 Variety, distribution and frequency of noun phrases in sample text

8. VERB PHRASES

8.0 *INTRODUCTION*

The verb phrase (VP) is that part of a clause which occurs following the optional subject (except in the subject-less existive clause) and before the object, indirect object, or complement slots of all normal or major clause types. The verb phrase functions as the (simple) predicate of the sentence.

The verb phrase consists of one or more (main) verbs (Vb) and/or one or two preceding preverbs (pVb), optionally preceded successively by a verbal particle (vPt) and/or a preverbal adverb (pvAdv). All four elements may be present; a main verb or preverb must be present. The verb phrase may thus be summarised as follows (post-hyphenated elements can not be phrase final, hyphenated elements within parentheses indicate a second or third (concatenated) similar element). This is a general formula in that verb phrase types ($_{x}$VP) correspond to the verb class ($_{x}$Vb) of the last verb in the phrase, as outlined in the following section.

$_{x}$VP: pvAdv- vPt- pVb (-pVb) ((Vb-)Vb-)$_{x}$Vb

Each of these verb phrase components will be discussed in the following sections in the reverse of their linear order. Both verb phrase types and main verb subclasses are discussed in 8.1. The last section cites the variety and frequency of the verb phrase in the sample analysed text.

8.1 *MAIN VERBS*

Main verbs (Vb) are those elements which alone may fill the verb phrase slot in clauses without depending upon the context. (Preverbs may also occur alone, but the context implies the elliptic main verb.) In the maximal verb phrase main verbs occur last, following preverbs (8.3); the next (non-VP) element of the clause follows the main verb.

There are eight main verb subclasses which correspond to the verb phrase type in which they may occur which, in turn and for the first six listed verb subclasses, corresponds to the maximal or "highest" clause type in which the verb phrase may occur. Figure 9.1 in section 9.0 shows six basic clause types in which the six corresponding verb phrases occur. Lowest in the figure is the intransitive clause in which (and only in which) the intransitive verb phrase occurs; highest in the figure is the quotative clause in which the quotative verb phrase (and only the quotative verb phrase) occurs. But the verb phrase corresponding to any "higher" clause type may occur in any "lower" clause type as indicated by descending arrows in the above-mentioned figure. (In the examples of Sedang clauses cited throughout the text, if a given verb phrase occurs in a "lower" clause type it is so indicated in the abbreviated syntactic statement following the example (e.g. "T CL w B Vb" indicates a transitive clause with bitransitive verb).)

The eight verb subclasses follow.

Quotative verbs

Only quotative verbs (Q Vb) may occur in the quotative verb phrase (Q VP) which only occurs in the quotative clause (Q CL, 9.1). Q Vbs form a small subclass of verbs which include the following. Each quotative verb may be followed by a direct quote.

eng *'to ask'*
khến *'to tell, say'*
kreố *'to call'*
pa *'to request'*
pơchan *'to advise, warn'*
tia *'to answer'*
tối *'to tell, say'*
tơmiat *'to think, consider'*
thế *'to command'*; cf. pVb thế *'must'* (8.3)

(The distinction between khến and tối is sometimes given as a matter of respect. Younger people tối with older people whereas older people khến with younger people.)

Container verbs

Only container verbs (C Vb) occur in the container verb phrase (C VP). The container clause (C CL, 9.2) is the highest clause type in which the container verb phrase may occur. C Vbs form a small subclass of verbs which include the following. Because the C VP may be followed maximally by a ("contained" or embedded) clause each of the following C Vbs is so illustrated.

Ám á ka hme. *'Give, permit - me to eat rice.'* (C CL(T CL))
Ja á ối u me. *'Take, carry, guide - me to live over there.'* (C CL(I CL, LocP))
Kôm kúan preố. *'Wait - for child to return.'* (C CL(I CL w S Vb))
Kơnó á tơpa xeh. *'Recognise - that I am pregnant.'* (C CL(Ben Eql CL))
Lôh pó lo dei. *'Permit, allow - you to go out.'* (C CL(Ben I CL w S Vb))
Lôu má pei 'báng. *'Release, permit - us to pound (rice) together.'* (C CL(I CL w T Vb, LocP))
Hlo gá hiáng pôu. *'See - he is already drunk.'* (C CL(I CL))
Mơni gá hla. *'Guess, suppose, think - he is dead.'* (C CL(Eql CL))
Hma eh 'mei. *'be acquainted, familiar - he is evil!'*; cf. pVb hma *'to know about, do habitually'* (8.3)
Hnê pin pế hme. *'Teach - us to cook rice.'* (C CL(T CL))
'Nai kia ka mơngế. *'Know, understand - ghosts eat people.'*

Ngán gá ői a tơniam. *'Look at, see - him (being) in the forge.'* (C CL(I CL, LocP))

Pốu eh chai klea. *'Dream - you have diarrhea.'* (C CL(Eq1 CL))

Pro eh chiang mơngế lém. *'Do, make - you become a good person.'* (C CL(Eq3 CL))

Tang gá chuat. *'Hear, listen - him make noise.'* (C CL(I CL))

Va eh preố. *'Want - you to return.'*; cf. preverb va *'to be about to'* (8.3) and PurPt va *'in order to'* (10.3) (C CL(I CL w S Vb))

Xau gá lơka má. *'Be afraid - he will eat us.'* (C CL(T CL w lơ-T Vb))

Xo chok pong xiam kơlá. *'Get, take - a shrew to cut through the bamboo.'* (C CL(T CL))

Bitransitive verbs

Only bitransitive verbs (B Vb) occur in the bitransitive verb phrase (B VP). The bitransitive clause (B CL, 9.3) is the highest clause type in which bitransitive verb phrase may occur. B Vbs form a small subclass of verbs which include the following. Because the B VP may be followed maximally by an object noun phrase and an indirect object prepositional phrase, each of the following B Vbs is so illustrated.

Chôu báu tung hngei. *'Place, put - rice in house.'* (B CL)

(Hu)hvat pơkéang a kố. *'Throw - powder here.'*

Kúm báu tung hngei. *'Pile - rice in house.'*

Lôi ko a 'ngei. *'Leave, abandon - head up high.'*

Ta préi tung vó. *'Place, put - the two in a jug.'*

Hváng gá tung trap. *'Throw - him into mud.'*

Xang klóng a kóng. *'Slide - the bamboo (cylinder) onto the arm.'*

Semitransitive verbs

Only semitransitive verbs (S Vb) occur in the semitransitive verb phrase (S VP). The semitransitive clause (S CL, 9.4) is the highest clause type in which semitransitive verb phrases occur. S Vbs form a small subclass of verbs which include the following. Because the S VP may be followed maximally by an indirect object noun phrase, each of the following S Vbs is so illustrated.

Chai a hngei. *'Return - home.'*

Kơtau Kontum. *'Run - to Kontum.'*

Kleh tung hlau. *'Fall - into the bamboo.'*

Klêng Ngo Éang. *'Go up - Mount Eang.'*

Lám tróang. *'Go - on the path.'*

Lo hông cham. *'Go out - on the down side.'*

Mot trúam. *'Enter - the hole.'*
Preŏ pơlê. *'Return - to the village.'*
Siam a ngia pa. *'Approach - to in front of father.'*
Veh a me. *'Return - there.'*

Transitive verbs

Only transitive verbs (T Vb) occur in the transitive verb phrase (T VP). The transitive clause (T CL, 9.5) is the highest clause type in which transitive verb phrases occur. T Vbs form a large, perhaps the largest, subclass of verbs which include the following. Because the T VP may be followed maximally by an object noun phrase, each of the following T Vbs is so illustrated.

Ái hme. *'Have - rice.'*; cf. pVb ái (8.3) and Ex Vb ái (below) (T CL)
Ap pôm. *'Roast - potatoes.'*
Chai klea. *'Sick - intestines.'*
Chêh hlá mơ-éa. *'Write - a book.'*
Há rơkong. *'Open wide - mouth.'*
Hôu eh. *'Hate - you.'*
Ka hme. *'Eat - rice.'*
Ko klóng. *'Chop - bamboo.'*
Loi á. *'Believe - me.'*
Hneng tea. *'Carry - water.'*
Ok tea. *'Pour - water.'*
Péng chêm. *'Shoot - birds.'*
Pei chiak. *'Work - field.'*
Po nha. *'Hoe - weeds.'*
Rôe po. *'Buy - salt.'*
Tiu 'bok. *'Follow - priest.'*
Um phái. *'Winnow - rice.'*

Intransitive verbs

Only intransitive verbs (I Vb) occur in the intransitive verb phrase (I VP). The intransitive clause (I CL, 9.6) is the highest and only clause type in which the intransitive verb phrase occurs. I Vbs form a large subclass of verbs which include the following.

eak *'to defecate'*
hèa *'to vomit'*
hiam *'to breathe'*
huam *'to bathe'*
iu *'to whistle'*

koi *'to sleep'*
kɔchei *'to sneeze'*
lông *'to sing a lullaby'*
hla *'to die'*; cf. vAdj hla *'to be dead'* (7.1)
mei *'to rain'*
ố́i *'to live'*; cf. pVb ố́i *'to continue to be'* (8.3), Eq Vb ố́i *'to be'* (below)
pɔtê *'to rest'*
to *'to laugh'*
xah *'to play'*
xuông *'to get up'*

Equative verbs

Only equative verbs (Eq Vb) occur in the equative verb phrase (Eq VP). The equative clause (Eq CL, 9.7) is the only clause type in which the equative verb phrase occurs. Eq Vbs form a very small subclass of verbs which include the following and define the four equative verb phrases in which they occur.

Eq1 Vb: ∅ *'(the zero copula)'*
Eq2 Vb: xê *'to be'*
Eq3 Vb: chiang *'to become'*; cf. pVb chiang *'to be able to'* (8.3)
Eq4 Vb: ố́i *'to be'*; cf. I Vb ố́i *'to live'* (see above), pVb ố́i *'to continue to be'* (8.3)

Existive verb

Only the existive verb (Ex Vb) occurs in the existive verb phrase (Ex VP). The existive clause (Ex CL, 9.8) is the only clause type in which the existive verb phrase occurs. ("Existive" is taken from Pike and Pike (1977, pp. 146, 149) which, in turn, was taken from Hale 1973.) There is only one member of this subclass of verbs.

á́i *'there is/are'*; cf. pVb á́i (8.3) and T Vb á́i (above)

8.2 *VERBAL CONCATENATION*

Main verbs may be concatenated into a series of two, three, or four (and structurally, but not practically, more) adjacent verbs. There are three types of verb concatenation: reduplicative concatenation, simple concatenation, and (a composite of these) complex concatenation.

Reduplicative concatenation

For stylistic or emphatic purposes a main verb may be repeated one or more times. Sometimes this indicates a repeated or prolonged action.

Gá ko ko ko muih. *'He chopped and chopped and chopped (the trees in the) field.'* (T CL)

Préi tɔkat tɔkat tɔkat. *'They wrestled and wrestled and wrestled.'* (I CL)

Me gá prôk prôk prôk. *'Then he went and went and went.'* (Temp, I CL w S Vb)

Simple concatenation

For description of successive actions main verbs may be concatenated together. Most commonly the first verb is a semitransitive verb expressing motion followed by (a) another semitransitive verb, (b) a transitive verb, or (c) a quotative verb.

(a) chai trôh *'return and approach'*
xuông kɔtau *'get up and run'*
lám lo *'go and exit'*
mot prôk *'enter and go'*

(b) lám mɔdro *'go and trade'*
mot ôu *'enter and drink'*
chu rôe *'go down and buy'*
kɔtau péng *'run and shoot'*

(c) chu eng *'go down and ask'*
tak tối *'go up and say'*

The main verb 'nai *'to know'* is frequently followed by another main verb with the idea of knowing how to do something.

'nai chêh *'know how to write'*
'nai ka *'know how to eat'*

But there does not appear to be any restriction upon the verb types which may occur together in this way. The last of the concatenated verbs determines the permitted clause type occurrence (9.0).

pɔchan thế *'warn and command'* (Q - Q Vb)
xah tia *'play(fully) answer'* (I - Q Vb)
rɔngei tó *'sing and laugh'* (I - I Vb)
krí ka *'pick (fruit) and eat'* (T - T Vb)
puat xo *'reach in and get'* (S - C Vb)
kɔtau xau *'run (being) afraid'*
rɔxá xau *'nervous and afraid'* (I - C Vb)

Concatenation of three main verbs corresponds to these same above types.

chu hɤda chai *'go down and flee and return'* (S - S - S Vb)
tông mot chai *'carry, enter and return'* (T - S - S Vb)
'nai tɤpui tɤveh *'know how to speak and return (an answer)'*
(C - I - I Vb)

Complex concatenation

Complex concatenation consists of the repetition of a main verb with the addition of one or more other main verbs. Or the repeated verb may be the last verb in the series.

tak tak ngán xo *'go up, up, look for and get'* (S - S - C - C Vb)
tiu tiu tiu klêng *'follow, follow, follow, going up'*
(T - T - T - S Vb)
mot prôk prôk prôk *'enter and walk, walk, walk'* (S - S - S - S Vb)

8.3 *PREVERBS*

In the maximal verb phrase preverbs (pVb) follow verbal particles (8.4) and precede the main verb (8.1-2). Preverbs may occur alone as a clause or be the only element of the verb phrase present in a clause (except for páng ti and u, see below), though the absent main verb will be implied from the preceding context. Semantically preverbs relate to the involvement of the actor in the predication.

The preverbs form a small class which includes the following.

ái *'be definitely'*; about 75% of its occurrences are in negated verb phrases; cf. T Vb ái *'to have'* and Ex Vb ái *'there is/are'* (8.1); ái in its combined uses is the sixteenth most frequent word in the 27,437-word text occurring 290 times.
Gá ta ái hla. *'He did not die.'* (I CL)
'Bok ái hlo á oh. *'The foreigner did not see me.'* (T CL, fPt)
Ôh ta ái hôu. *'(He) did not hate.'* (I CL w T Vb)
'Bok xối ái loh ôh. *'The priest did not permit it.'*
(I CL w C Vb, fPt)

búa *'to try to, to attempt to'*
Búa chu ngán 'nôi. *'(You) try and go down and see.'*
(Imp I CL w C Vb, fPt)
búa ka *'try to eat'*

cha *'to be able to'*; cf. N cha *'body'*, T Vb cha *'to get'* and S Vb cha *'return'* (8.1)
Pin cha ka rɤkái. *'We can eat boar.'* (T CL)
Á pa cha ối rɤtro. *'I cannot be happy.'* (Eq4 CL)

chiá *'to do or become increasingly so'*

Gá chiá lém ta. *'She became increasingly more beautiful.'* (Eql CL, CompP)

chiang *'to be able to'*; cf. Eq Vb chiang *'become'* (8.1)

Me gá ôh ta chiang pro kán pơlê. *'But he wasn't able to work as a village chief.'* (Temp, T CL w C Vb)

Gá ôh ta chiang to xeh ôh. *'It wasn't able to cross by itself.'* (Refl I CL w S Vb, fPt)

dá *'to continue to'*

Eh dá dea lôi. *'You continue to pour (it) out.'* (Imp I CL w T Vb)

hêng *'to crave'*

Á hêng ka ká. *'I crave to eat fish.'* (T CL)

kai *'to be able to'*; always used with a negative particle

Á kai 'blei ôh. *'I'm unable to win.'* (I CL w T Vb, fPt)

Gá ta kai koi. *'He was unable to sleep.'* (I CL)

khên *'to dare to'*

Gá khên ôh - ối tung ró kố. *'He did not dare to stay in this basket.'* (I CL, fPt),(I CL, LocP)

Eh hôm khên? *'Do you dare (to stay here)?'* (I CL)

khoh *'should, ought to, to permit'*; is always used in the negative, e.g. ôh ta khoh *'taboo'* or interrogative a hôm khoh *'is it permitted?'* except in affirmative response (10.7) khoh *'not taboo'*

Vai ôh ta khoh ka chó me nah. *'It was taboo for them to eat dog back then.'* (T CL, fPt)

Khoh ôh - ka kơteố tung ngo me. *'It's not permitted to eat sugarcane on that mountain.'* (I CL, fPt),(T CL, LocP)

klei *'to finish, conclude, stop, end, after'*

Klei po nha neố vai pơtê. *'After hoeing weeds some more, they rest.'* (TempP(T CL, fPt), I CL)

Má klei rơngei kố. *'We are finished singing.'* (I CL, LocP)

líng *'to do habitually or continuously'*

Á pa líng u rơngei xúa o á u krôu. *'I cannot continue singing because my child is crying.'* ((I CL), CausConj(I CL))

mơ-éam *'to strive to, to try hard to'*

U hiat dei. Xei kố ah mơ-éam ka dei ket dro. *'(She) forgot again. In the afternoon (she) tried hard (to remember) to eat the* dro *frog.'* (Refl I CL w T Vb) (TempP, Refl T CL)

hma *'to know about, to do habitually'*; cf. C Vb hma *'be acquainted with'* (8.1)

Gá hma bong dei a xiam trống. *'He always urinated at the base of the eggplant.'* (Refl I CL, LocP)

Hma hlo vai pôu 'di'do. *'(He) was accustomed to see them drunk all the time.'* (C CL(I CL, fPt))

ối *'to continue, remain'*; observed to occur only before Ex Vb ái *'there is/are'* (8.1); cf. I Vb ối *'to live'*, Eq Vb ối *'to be'* (8.1)

Nô kố ối ái péa pái to rối xo. *'Now there are remaining two or three files only.'* (Temp, Ex CL, fPt)

A hôm ối ái drôu neố? *'Is there still more wine?'* (Ex CL, fPt)

páng *'to be able to'*

Gá ôh ta páng hla. *'He couldn't die.'* (I CL)

Ja gá hiáng páng tơpui. *'His grandmother could speak.'* (I CL)

Gá ôh ta páng pei chiak. *'He couldn't work in the fields.'* (T CL)

páng ti *'to be unable to'*; may not occur without a following main verb

Kơnốu á páng ti lém ti kố. *'My husband can't be good like this.'* (Eql CL, ManP)

Páng ti péng. *'(She) was unable to fill (it).'* (I CL w T Vb)

pơxiam *'to start to, to begin to'*

Gá pơxiam mot neố. *'He began to go in some more.'* (I CL w S Vb, fPt)

Í pơxiam róng. *'The rooster begins to crow.'* (I CL)

hro *'to be able to'*; usually used in the negative

Pin hro 'blei ôh. *'We are unable to win.'* (I CL w T Vb, fPt)

Eh ta hro ja. *'You are unable (to do it), grandmother.'* (I CL w elided verb, Voc)

thế (sometimes athế, a Bahnarism) *'must, be necessary'*; cf. Q Vb thế *'to command'* (8.1)

Pin thế dea lôi hơdrối. *'We must pour (it) out first.'* (I CL w T Vb, DesP)

u *'still, continue to'*; may not occur without a following main verb; cf. N u *'place'*, PurPt u *'in order to'*

U ái hmốu. *'There are still stones.'* (Ex CL)

Gá u hiat dei. *'She continued to forget.'* (Refl I CL w T Vb)

uan *'to do something quickly, for the first time'*

Uan pé pé hme 'nôi. *'(He) quickly cooked rice.'* (T CL, fPt)

va *'to be about to, to want to'*; cf. C Vb va *'to want'* (8.1) and PurPt va *'in order to'* (10.3); in some sentences the distinction between this pVb and the C Vb is difficult to discern; va in its combined uses is the twelfth most frequent word in the 27,437-word text, occurring 333 times

Kong va mei. *'It (the land) is about to rain.'* (I CL)

Á va rơngei - hôm hã. *'I want to sing too.'* (I CL)(Resp, fPt)
Va. *'(I) want (to eat).'* (Frag)

Two preverbs may occur together in a verb phrase. The following have been observed together.

páng u
Gá pa páng u chai. *'He wasn't able to return.'* (I CL w S Vb)

va cha
Pơ-ia va cha ka 'nang. *'(I'm) just about able to eat (it) for sure.'* (I CL w T Vb, fPt)

8.4 *VERBAL PARTICLES*

In the maximal verb phrase verbal particles (vPt) follow preverbal adverbs (8.5) and precede preverbs (8.3). Verbal particles must be followed by either a preverb and/or a main verb (except for the responses hiáng and ta hài). Semantically the verbal particles relate to the state of the predicate: affirmation (including tense), denial and question. Also, two verbal particles are negative imperatives (though some final particles are also imperatives).

Verbal particles form a small class which includes the following.

a hài, hài *'yet?'*, a hài chói *'ever yet?'*; with stress on hài the preceding a is frequently elided; the answer requires either dế, hiáng, ta hài, chói (see below) or the response (hài) 'nhiah (10.7)
A hài lôi? *'Have (you) quit yet?'* (I CL w C Vb)
Eh a hài chói ka xei? *'Have you ever eaten horse(meat)?'* (T CL)

a hôm, hôm *'(yes-no question marker)'*; with stress on hôm the preceding a is frequently elided; the answer requires either a response hôm or ô-ôh (10.7), ôh ta (see below), or an affirmative statement
Eh a hôm hlo rơtám me. *'Have you seen that boy?'* (T CL w C Vb)
Hôm xê? *'Is that so?'* (Eq2 CL)

chói, hài chói, ta ái chói *'never'*, ôh ta chói la lai *'never ever'*; used as an answer to an a hài question (see above)
Gá chói hôu á. *'He never hated me.'* (T CL)
Tơring me á hài chói lám ôh. *'I've never gone to that area.'* (I CL w S Vb)

dế *'currently (progressive action)'*; cf. N dế *'middle'*, TempP dế *'while'* (10.1)
Plong me dế ái hã. *'That canoe still exists.'* (CoEmp Ex CL, fPt)
Préi me dế tơkat. *'Those two are wrestling still.'* (I CL)

hiáng *'already (past tense marker)'*; indicates completion; used in answer to an a hài question (see above); hiáng may occur as a response fragment or may, by ellipsis, be sentence final (12.9), else must be followed at least by a preverb or main verb
Á hiáng ám eh pơkéang. *'I already gave you the powder.'* (Ben T CL w C Vb)

ma ta *'don't (imperative)'*; cf. Imp CL (11.1)
Nô kố eh ma ta hnap tróang á hôu. *'Now don't you block my path, okay?'* (Temp, Imp T CL, fPt)

ôh pa, pa *'not (negative)'*; ôh is stressed, pa unstressed – usually ôh is elided with consequent loss of a stress peak
Vai nôu pa nhóng o ôh pa va gá. *'The parents and relatives don't want him.'* (T CL w C Vb)
Á pa 'nai ti lai. *'I don't know why.'* (I CL w C Vb, ManP)

Ôh ta, ôh ti, ôh tu, ta, ti, tu *'not (negative)'*; ôh is stressed, ta/ti/tu unstressed – sometimes ôh is elided with consequent loss of a stress peak; ti is an infrequent variant of ta; as the only case in Sedang of vowel assimilation to a following consonant, tu occurs only before the C Vb or pVb va; cf. fPt ôh (10.4) with which ôh ta frequently cooccurs; as a two-(phonological)word sequence ôh ta is the second most frequent two-word sequence in the 27,437-word text, occurring 178 times, and as a three-word sequence occurs in the first two most frequent sequences: ôh ta ái 40 times and ôh ta 'nai 32 times
Ôh ta ái báu i ka. *'There is no rice to eat.'* (Ex CL, PurP)
Á ôh ti 'nai. *'I don't know.'* (I CL w C Vb)
Eh khến ôh tu va á. *'You say (you) don't want me.'* (C CL w Q Vb(T CL))
Pin ta lém cha. *'We are not well.'* (Eql CL)

pôi ta *'don't (imperative)'*; cf. Imp CL (11.2)
Pôi ta ám má ôh. *'Don't give us two (any).'* (Imp Ben I CL w C Vb, fPt)
Eh pôi ta ka á. *'Don't eat me.'* (Imp T CL)

ta hài *'not yet'*; used as a negative answer to a hài (see above)
Á ta hài pé hme. *'I have not yet cooked rice.'* (T CL)

Verbal particles may not be compounded. Whereas in all examples cited in this section a main verb (or vAdj) follows the verbal particle, in 8.3 there are several examples of a preverb following the verbal particle.

The negative particle ôh, which occurs as ôh pa, ôh ta, ôh ti and ôh tu and as the negative final particle ôh (10.4), is the seventh most frequent word in the 27,437-word text, occurring 478 times.

The negative particle ta, which occurs as ma ta, ôh ta, ta, pôi ta and ta hài, is the tenth most frequent word, occurring 355 times. The verbal particle hiáng is the ninth most frequent, occurring 376 times.

8.5 *PREVERBAL ADVERBS*

In the maximal verb phrase preverbal adverbs (pvAdv) are initial, followed by verbal particles (8.4). Preverbal adverbs may not occur alone in the verb phrase but must be followed at least by a preverb or main verb. As noted below, some preverbal adverbs may precede the subject.

Preverbal adverbs are a small class which includes the following.

hơnun *'also, usually'*; hơnun infrequently occurs before the subject

Ngin hơnun kơdê eh. *'We will also kill you.'* (T CL)

Ngế me gá hơnun ôh ta ái lián. *'That person usually does not have money.'* (T CL)

hlik *'necessary, needful'*; observed to occur only before va

Gá hlik va ka. *'He had to eat.'* (I CL w T Vb)

hmeô pa *'unnaturally, unaccustomed, strangely'*

Hmeô pa tó. *'(He) laughed unnaturally.'* (I CL)

hmôu pa *'with great desire'*

Hmôu pa ti rơngei. *'(I) really don't want to sing.'* (I CL)

Á hmôu pa chiang xeh ti kố. *'I really want to be like this.'* (Refl Eq3 CL, ManP)

neố *'to have just'*; cf. fPt neố *'again, more'* (10.4)

Gá neố loi. *'He just (now) believed.'* (I CL w T Vb)

hnối *'immediately, right away'*; frequently cooccurs with fPt hlối *'immediately'* (10.4)

Vai va kơdê gá me gá hnối preố hlối. *'They were about to kill him so he returned immediately.'* ((T CL), ResConj(I CL w S Vb, fPt))

rế *'slowly but surely'*

Kong rế xei. *'Afternoon came on slowly.'* (I CL)

Ton rế ache rơpám. *'After a long time (he) slowly (approached) nearer the field house.'* (AdvEmp S CL w elided S Vb, QuanP)

xuan *'also'*; infrequently may occur before the subject

Kơnốu xuan huam hông pêng. *'The husband also bathed further up(stream).'* (I CL, LocP)

Preverbal adverbs may not be compounded. The examples above cite instances of preverbal adverbs occurring before verbal particles, preverbs, and main verbs.

8.6 *VARIETY AND FREQUENCY OF VERB PHRASES*

Chart 8.1 lists 14 different verb phrase forms which occur 715 times in the analysed sample of continuous text. Each of these verb phrase forms is included in the description above; there are other combinations, however, which are structurally possible (some, but not all, of which have been observed elsewhere) but not occurring in this limited sample.

Single main verbs occur most often (65%). Three different 2-component phrases – verb-verb, preverb-verb, and verbal particle-verb – each occur about 10% of the time. All other verb phrase types occur infrequently. There is no observed restriction of verb phrase type with any of the clause types (chapter 9).

					No.
				Vb	459
				Vb Vb	70
				Vb Vb Vb	3
			pVb	Vb	67
			pVb	Vb Vb	2
		vPt	pVb	Vb	16
		vPt	pVb	Vb Vb	1
	pvAdv	vPt	pVb	Vb	1
	pvAdv		pVb	Vb	2
			pVb pVb	Vb	1
		vPt		Vb	85
		vPt		Vb Vb	2
	pvAdv	vPt		Vb	1
	pvAdv			Vb	5
Totals:	pvAdv 9	vPt 106	pVb 89	Vb 637	
			pVb pVb 1	Vb Vb 75	
				Vb Vb Vb 3	
	9	106	90	715	715

Chart 8.1 Variety and frequency of verb phrases in sample text

9. BASIC CLAUSE TYPES: NUCLEAR ELEMENTS

9.0 *INTRODUCTION*

Clauses (CL) are the principal, and usually the only, component of the next higher syntactic level, the sentence (chapter 13). Clause

structure relates the predicate or verb phrase (chapter 8) to the various nuclear nominal phrases (chapter 7) as well as to other peripheral clause level fillers (chapter 10). Clauses also occur embedded in the basic noun phrase (7.1). This chapter describes the occurrence of nuclear clause elements in the basic clause types and chapter 10 the peripheral elements whereas chapter 11 describes variations – both permutations and transformations – of the nuclear and peripheral elements of these basic clause types. (Nuclear elements are the more independent part of the construction whereas the peripheral elements are the dependent part.)

There are eight major clause types as determined by the number, order, and/or type of nuclear nominal phrases. Only the subject noun phrase is (optionally) common to all types (except the existive clause), though its semantic significance may be different (cf. 9.1-6 versus 9.7).

Six basic clause types are interrelated by verb phrase occurrence potential. ("Potential" implies an element is absent only by ellipsis (12.9) and is otherwise considered essential for grammatical completeness whereas "optional" indicates an element may be absent and is not essential for grammatical completeness.) The verb phrase known by the same name as these six clause types occurs in that clause type and of any lower – but not higher – clause type. Figure 9.1 shows these inter-clause relationships; "higher" and "lower" clause types refer to relative position of clause types in this figure. The quotative clause is the "highest" clause type; the intransitive clause is the "lowest" clause type. Quotative verb phrases (Q VP) occur in the quotative clause (Q CL), as well as in the container clause (C CL), the transitive clause (T CL), and the intransitive clause (I CL). Container verb phrases (C VP) occur in the container clause, the transitive clause, and the intransitive clause. Bitransitive verb phrases (B VP) occur in the bi-transitive clause (B CL), as well as in the transitive clause, the semi-transitive clause (S CL), and the intransitive clause. Transitive verb phrases (T VP) occur in the transitive clause as well as in the intransitive clause. Semitransitive verb phrases occur in the semitransitive clause as well as in the intransitive clause. But intransitive verb phrases occur only in the intransitive clause. These six clause types are discussed in 9.1-6. The two other basic clause types are the equative clause (Eq CL, 9.7) and the existive clause (Ex CL, 9.8). In 9.9 the frequency of these basic clause types in the sample analysed text is indicated.

Some of the examples used in this chapter are imperative clauses which, though included among the clause tranformations of chapter 11, do not differ by order of constituents from the corresponding basic clause.

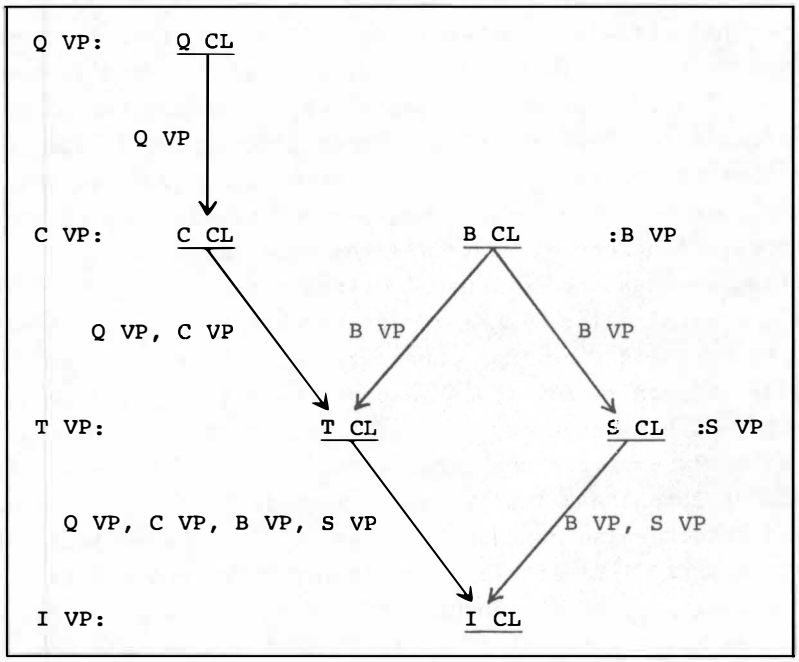


Figure 9.1 Interclause relationships and verb phrase potential

9.1 *QUOTATIVE CLAUSE*

The quotative clause (Q CL) has an optional subject (S) as actor filled by a noun phrase, and, by definition, each of the following in order: a predicate (Pred) filled by a quotative verb phrase (thus, potentially, a quotative verb), and an object (O) as (direct) quotation filled by any free syntactic unit from a discourse down to a single word. There is usually a juncture or brief pause preceding the object quotation, and the quotation has an intonation independent of that of the main clause; this juncture and intonation distinguish the quotative clause from other clause types in the cases where the quotation may otherwise be an indirect rather than a direct quotation. The quotative clause thus has the following form.

Q CL: (S:NP-) Pred:Q VP -O:Quote

(Some quotative verbs are listed in 8.1.)

Kia khến, "Kɔbố thế?" *'The ghost said, "Who commanded?"'*
(Q CL(I CL w Q Vb))

Me rɔtám me kreố, "A-Piá." *'Then that fellow called, "A-Pia."'*
(Temp, Q CL(Voc))

About 10% of all quotative clauses in the analysed text state the addressee; such clauses are here included among the benefactive clauses (see 11.2).

9.2 *CONTAINER CLAUSE*

The container clause (C CL) – so named because it includes an embedded or "contained" clause (Thomas 1971:72) – has an optional subject as actor filled by a noun phrase, and, by definition, each of the following in order: a predicate filled by a quotative verb phrase or a container verb phrase (thus, at least potentially, a quotative or container verb), and an object as statement filled by a clause. The contained clause may be of any clause type, including another container clause. With a quotative verb in the container clause the subject of the contained clause is not present if it has the same referent as that of the container clause, but is present if it doesn't have the same referent; this is an indirect quotation. With a container verb in the container clause the contained clause usually has an explicit subject; a conjoining of two container main verbs would be verbal concatenation (8.2). There is no juncture preceding the contained clause. The container clause thus has the following form:

C CL: (S:NP-) Pred:Q VP/C VP -O:CL

Examples are cited below with each type of permitted verb phrase. (Some container verbs are listed with following clauses in 8.1.)

Q VP: Eh khến ôh tu va á. *'You say (you) don't want me.'* (C CL w Q Vb(T CL))

Á tang vai tối klá hiáng ka chối. *'I hear (that) they say a tiger has killed a deer.* (C CL w Q Vb(C CL w Q Vb(T CL)))

Á tang ái vai tối va cheng. *'I hear there are those (who) say (they) want gongs.'* (C CL w Q Vb (Ex CL:(Co:(C CL w Q Vb (T CL)))))

C VP: Á pro eh lém. *'I'll make you good.'* (C CL(Eql CL))

Tang hiáng ám préi ka hme. *'Tang already gave (or permitted) the two to eat rice.'* (C CL(T CL))

Gá 'nai mau kia ka mơngế. *'He knows those ghosts eat people.'* (C CL(T CL))

9.3 *BITRANSITIVE CLAUSE*

The bitransitive clause (B CL) has an optional subject as actor filled by a noun phrase and, by definition, each of the following in

order: a predicate filled by a bitransitive verb phrase (thus, potentially, a bitransitive verb), an object as undergoer filled by a noun phrase (i.e. any of the phrases described in chapter 7 except the prepositional phrase), and an indirect object as locative filled by a prepositional phrase. The bitransitive clause thus has the following form:

B CL: (S:NP-) Pred:B VP -O:NP -IO:PrepP

(Some bitransitive verb phrases with following object and indirect object are listed in 8.1.)

B VP: Pin chôu báu tung hngei. *'We put the rice in the house.'* (B CL)
Gá hvang gá tung trap. *'He threw him in the mud.'*

9.4 *SEMITRANSITIVE CLAUSE*

The semitransitive clause (S CL) has an optional subject as actor filled by a noun phrase and, by definition, each of the following in order: a predicate filled by a bitransitive verb phrase or semitransitive verb phrase (thus, potentially, a bitransitive verb or a semitransitive verb), and an indirect object as locative filled by a prepositional phrase in the case of bitransitive verb phrases or by any noun phrase in the case of semitransitive verb phrases. The semitransitive clause thus has the following form (asterisks identify cooccurrence restrictions):

S CL: (S:NP-) Pred:B VP*/S VP** -IO:*PrepP/**NP

(Some semitransitive verb phrases with following indirect object prepositional phrase are listed in 8.1.)

B VP: Gá chôu tung hngei. *'He put (it) in the house.'* (S CL w B Vb)
Lôi a 'ngei. *'Leave (it) up high.'* (Imp S CL w B Vb)

S VP: 'Na kleh tung rɔtôh. *'Some fell in bamboo.'* (S CL)
Kɔdrá kɔtra pɔpêng tɔnei. *'The in-laws stepped above the earth.'*
Á chu kong leó. *'I'm going down to Laos.'*
Vai to hngei kó. *'They climb up to the house.'*

9.5 *TRANSITIVE CLAUSE*

The transitive clause (T CL) has an optional subject as actor filled by a noun phrase and, by definition, each of the following in order: a predicate followed by a quotative verb phrase, a container verb phrase, a bitransitive verb phrase, or a transitive verb phrase (thus, potentially, a quotative, container, bitransitive, or transitive verb), and an object as undergoer filled by a noun phrase. The transitive clause thus has the following form:

T CL: (S:NP-) Pred:Q VP/C VP/B VP/T VP -O:NP

(Some transitive verb phrases with following noun phrase are listed in 8.1.)

Q VP: Á va tối tơdróang. *'I want to tell something.'* (T CL w Q Vb)
'Na khến ià. *'Some say ia.'*

C VP: Gá pro kơnúa. *'He made a scraper.'* (T CL w C Vb)
Xéang véang gá me. *'The spirit helped him.'*
Va hlo ro. *'(You) want to see a cow.'*

B VP: Eh hvang pơkéang ki me. *'You throw that powder.'* (T CL w B Vb)

T VP: Vai kra pei chiak. *'The old people work the fields.'* (T CL)
Koa me kuka tíng. *'The turtle bit the tail.'*
Gá tơ'dôu môi pơléang hơnéng. *'He broke one tooth.'*

9.6 *INTRANSITIVE CLAUSE*

The intransitive clause (I CL) has an optional subject as actor followed by a noun phrase and, by definition, only a following predicate filled by a quotative verb phrase, a container verb phrase, a bitransitive verb phrase, a semitransitive verb phrase, a transitive verb phrase, or an intransitive verb phrase (thus, potentially, a quotative, container, bitransitive, semitransitive, transitive, or intransitive verb). The intransitive clause thus has the following form:

I CL: (S:NP-) Pred:Q VP/C VP/B VP/S VP/T VP/I VP

(Some intransitive verb phrases are listed in 8.1.)

Q VP: Khến ti me. *'(He) said (it) like that.'* (I CL w Q Vb, ManP)
Tak tối tai. *'Go up there and tell (it).'* (Imp I CL w Q Vb, LocP)

C VP: Me préi u hlo ti me neố. *'The two saw (it) like that again.'* (Temp, I CL w C Vb, ManP, fPt)
Á tu va ôh. *'I don't want (it).'* (I CL w C Vb, fPt)

B VP: Lôi. *'Quit (it).'* (Imp I CL w B Vb)

S VP: Me préi u mot. *'Then the two went in.'* (Temp, I CL w S Vb)
Kúan gá me kơtau kơtau. *'His child ran and ran.'* (I CL w S Vb)

T VP: Vai chối neố. *'They plant more.'* (I CL w T Vb, fPt)
Ôh ta loi ôh. *'(I) don't believe (it).'*
Gá ôh ta ái. *'He doesn't have any.'* (I CL w T Vb)

I VP: Á tơpui. *'I talk.'* (I CL)
Gá hie. *'He is scratched up.'*

Mɔngé koi. *'A person sleeps.'*

Kia kɔtong. *'The ghost stumbled.'*

Chart 9.1 summarises the above six basic clause types and indicates the occurrence in them of the various verb phrases. Figure 9.1 above is another means of indicating the occurrence of the verb phrase subtypes in the various clause types.

CL type	*Nuclear slots*
Q	(S:NP-) Pred:Q VP -O:Quote
C	(S:NP-) Pred:Q VP/C VP -O:CL
B	(S:NP-) Pred: B VP -O:NP -IO:PrepP
S	(S:NP-) Pred: B VP*/S VP** -IO:*PrepP/**NP
T	(S:NP-) Pred:Q VP/C VP/B VP/ T VP -O:NP
I	(S:NP-) Pred:Q VP/C VP/B VP/S VP/T VP/I VP

Chart 9.1 Occurrence of verb phrase types and nuclear elements in the various basic clause types (asterisks indicate cooccurrence restrictions)

9.7 *EQUATIVE CLAUSES*

Equative clauses (Eq CL) state in the complement (Co) a character of the (sometimes potential) subject. There are four types of equative clause differing by (1) the occurrence requirement of the subject, (2) the specific equative verb phrase, (3) the complement filler possibilities, and (4) imperative transformation possibilities (11.2). Each of the four types of equative clauses is named for the equative verb occurring in it.

Zero verb equative clause

The zero verb equative clause (Eql CL) has an obligatory (thus unique among all clause types) subject as item filled by a noun phrase, and, by definition, a following predicate filled by a verb phrase with the "zero" (Ø) copula (Eql VP) and a following complement as character of subject filled by a noun phrase or verbal adjective. The zero verb equative clause thus has the following form:

Eql CL: S:NP - Pred:Eql VP - Co:NP/vAdj

The zero verb equative clause may not be transformed to an imperative. (Some verbal adjectives are listed in 7.1 as they function as verbal descriptives in the noun phrase.)

Co:NP: Pông Hlung kố kơnốu gá. *'This Pong Hlung is her husband.'* (Eq1 CL)
Môi ngế A-Piá. *'One person was A-Pia.'*
Gá trúam tơnei. *'It was an earth hole.'*
Inai pa A-Piá me Pơ-ông. *'A-Pia's father's name is Po-ong.'*
Gá páng ti môi hríng ngế. *'He wasn't one hundred people.'*

Co:vAdj: Báu tuam. *'The rice was ripe.'*
Koa páng ái tei. *'The turtle was definitely strong.'*
Gá hiáng túan. *'He was smart.'*
Pơlê gá me ro. *'That village of his was happy.'*

xê *'be'* equative clause

The xê *'be'* equative clause (Eq2 CL) has an optional subject as item filled by a noun phrase and, by definition, a predicate filled by a verb phrase with the xê equative verb (Eq2 VP) and an optional complement as character of subject filled by a noun phrase, verbal adjective, adverbial phrase (AdvP; 10.3), or clause. Most (95%) of the xê *'be'* equative clauses contain a negative or interrogative in the verb phrase. This clause type may not be transformed to an imperative. The xê *'be'* equative clause thus has the following form:

Eq2 CL: (S:NP-) Pred:Eq2 VP (-Co:NP/vAdj/AdvP/CL

Co:NP: Gá ôh ta xê mơngế. *'He's not a person.'* (Eq2 CL)

Co:vAdj: Kế me a hôm xê kan? *'Is that thing big?'*

Co:AdvP: Ôh ti xê ti kố. *'(It's) not like this.'*
Ôh ta xê trối chó pin. *'(It's) not like our dogs.'*

Co:CL: Gá xê hneng tea ôh. *'He's not (one who) carried water.'*

Minimal: Hôm xê? *'Is (that) so?'*
Ôh ta xê. *'(It) is not (like that).'*
Xê ôh. *'(It) is not (like that).'*

chiang *'become'* equative clause

The chiang *'become'* equative clause (Eq3 CL) has an optional subject as item filled by a noun phrase and, by definition, a predicate filled by a verb phrase with the chiang equative verb (Eq3 VP) and an optional complement as character of subject filled by a noun phrase or verbal

adjective. The chiang *'become'* equative clause may be transformed to an imperative (11.2). This clause thus has the following form. (Cf. pVb chiang *'to be able'*.)

Eq3 CL: (S:NP-) Pred:Eq3 VP (-Co:NP/vAdj)

Co:NP: Kœxêt híang chiang mœngé. *'The mushroom had become a person.'* (Eq3 CL)
Pœkéang chiang kœlá. *'Powder became bamboo.'*

Co:vAdj: Gá hiáng chiang kro. *'He became rich.'*
Ki me gá chiang pleng ta. *'Like that he became smarter.'* (AdvEmp Eq3 CL, CompP)

Minimal: Ôh ta chiang. *'(It) didn't become (that).'* (Eq3 CL)
Chiang. *'(It) became (that).'*

ői *'be'* equative clause

The ői *'be'* equative clause (Eq4 CL) has an optional subject as item filled by a noun phrase and, by definition, a predicate filled by a verb phrase with the ői equative verb (Eq4 VP) and an obligatory complement as character of subject filled by a verbal adjective. Thus this clause has uniquely only one filler for the complement. It may be transformed to an imperative (11.2). (Cf. I Vb ői *'to live'*.) The ői *'be'* equative clause thus has the following form:

Eq4 CL: (S:NP-) Pred:Eq4 VP - Co:vAdj

Gá ta ői reh. *'He wasn't alive.'* (Eq4 CL)
Rœtám me ői 'nai. *'That fellow was down low.'*

The four equative clauses are compared in Chart 9.2.

Clause type	*Nuclear elements*	*Eq. verb*
Eql CL	S:NP - Pred:Eql VP -Co:NP/vAdj	Ø
Eq2 CL	(S:NP-) Pred:Eq2 VP (-Co:NP/vAdj/AdvP/CL)	xê
Eq3 CL	(S:NP-) Pred:Eq3 VP (-Co:NP/vAdj)	chiang
Eq4 CL	(S:NP-) Pred:Eq4 VP -Co: vAdj	ői

Chart 9.2 Equative clauses

9.8 *EXISTIVE CLAUSE*

The existive clause (Ex CL) affirms or denies the existence of something. There is only one verb which occurs in the existive clause: á̱i *'there is/are'*. The existive clause has, by definition, a predicate filled by a verb phrase with the existive verb á̱i (Ex VP) and an optional complement as item filled by a noun phrase or clause. The existive clause thus has the following form:

Ex CL: Pred:Ex VP (-Co:NP/CL)

Co:NP: Xuan á̱i kɔnɔ́u. *'There is also a husband.'* (Ex CL)
Á̱i tróang lám a kɔ́. *'There is a (going) path here.'* (Ex CL, LocP)
Ô̱h ta á̱i tɔdróang xôi ôh. *'There is not sin.'* (Ex CL, fPt)

Co:CL: Á̱i kɔbɔ́ 'blei gá ôh. *'There was no one who could beat him.'* (Ex CL(T CL), fPt)
Sap nah ôh ta á̱i kɔbɔ́ khến ti me. *'For a long time there hasn't been anyone who spoke like that.'* (TempP, Ex CL(I CL w Q Vb), ManP)
Me á̱i préi tɔhôu dei pó. *'Then there were those two who hated each other.'* (Temp, Ex CL(Recip I CL w tɔ-T Vb))

Minimal: Á̱i. *'There is.'* (Ex CL)
Ô̱h ta á̱i. *'There isn't.'*
Á̱i ôh. *'There isn't.'* (Ex CL, fPt)

9.9 *FREQUENCY OF BASIC CLAUSE TYPES*

Chart 9.3 indicates the frequency of the above basic clause types in the sample analysed text. The most common combination of clause type and verb phrase type is the transitive clause with transitive verb phrase (20%). The most common clause types are the transitive clause (31%) and intransitive clause (29%). The most common verb phrase type is the transitive verb phrase (29%).

see Chart 9.3 overleaf

CL types	Verb phrase types						TOTAL
	Q VP	C VP	B VP	S VP	T VP	I VP	
Q CL	20						20
C CL	23	28					51
B CL			6				6
S CL			2	38			40
T CL	6	55	5		115		181
I CL	10	20	0	14	54	72	170
TOTAL	59	103	13	52	169	72	468
Eq CL							93
Ex CL							20
TOTAL							581

Chart 9.3 Frequency of verb phrase types occurring in basic clause types in sample text (holes in chart indicate clause types in which the verb phrase type does not occur for structural reason; a "0" indicates lack of an example in the sample text

10. PERIPHERAL CLAUSE ELEMENTS

10.0 *INTRODUCTION*

The nuclear syntactic elements of clauses were discussed in chapter 9. Clauses also have optional non-nuclear or peripheral elements which add detail to the clause and are discussed in this chapter. The peripheral elements generally occur independent of clause type but are integrally structured with the clause and include both prenuclear (10.1) and postnuclear (10.2-4) elements. The only prenuclear peripheral element is the temporal phrase (TempP). The postnuclear peripheral elements include the locative phrase (LocP), the adverbial phrase (AdvP), and final particles (fPt). A clause may thus have the following form:

CL: (TempP-) Nuclear elements (-LocP) (-AdvP) (-fPt)

The order of these peripheral elements within a clause is not rigid; though the above seems to be the norm, permutations do occur. Each of these peripheral slots may be duplicated one or more times within a clause. Note also that chapter 11 discusses variations of basic clause types entailing semantic-motivated reordering of some of the peripheral

elements discussed in this chapter. The various peripheral elements may, structurally, cooccur; but practically, none, one, or two are more common within a single clause.

10.1 *TEMPORAL PHRASE*

The optional temporal phrase (TempP) is the only prenuclear peripheral clause element apart from emphatic phrases in some clause variations. The temporal phrase establishes the temporal context of the clause predication. The temporal phrase may be a temporal (word) (Temp), a temporal demonstrative (TempDem), a temporal noun phrase (TempNP), or a subordinated temporal expression (SubTempExp). Though the temporal phrase normally occurs initially and is prenuclear, the temporal phrase, like other peripheral elements without rigid word order requirements, sometimes occurs postnuclear. Approximately one in four clauses in text has an initial temporal phrase.

Temporals

The temporals (Temp) which may constitute a temporal phrase form a small class of words and phrases and include the following:

a hɑdrɔ́i *'at first'*
la lai *'when?'*
nô kɔ́ *'now'*; occurs rather than the TempDem me
pɑ-ia/pa ia *'in a little while'*
ton *'for a long while'*

The final particle neɔ́ *'more, again'* (10.4) may be used after a temporal as an intensifier or a marker of subsequent action.

nô kɔ́ neɔ́ *'and now'*
pɑ-ia neɔ́ *'and then again, in a little while'*

Temporal demonstratives

There are four temporal demonstratives (TempDem) which partially overlap the general demonstratives (7.1) and final particles (10.4). Temporal demonstratives also occur in the basic noun phrase (7.1).

ah, kɔ̀ ah *'in the future, following, next'*; cf. fPt ah (10.4); ah in its combined uses is the seventeenth most frequent word in the 27,437-word text, occurring 285 times
kɔ́ *'this, now'*; cf. Temp nô kɔ́
me *'that, then'*; sometimes introduces resultant (independent) clause of conditional sentences (13.1); cf. Dem me (7.1), fPt me (10.4), CondConj me (13.3), and ResConj me (13.5)
nah *'in the past, former, previous'*; cf. fPt nah (10.4)

Temporal noun phrase

A temporal noun phrase (TempNP) used as a temporal phrase may be any basic (but time reference) noun phrase (7.1) usually requiring a following temporal demonstrative (TempDem). Time reference noun phrases include the following:

hài *'day'*
- hài kố *'today'*
- hài nah *'yesterday'*
- hài hmôi ah *'day after tomorrow'*
- hài hmôi nah *'day before yesterday'*
- (hài) so ah *'tomorrow'*
- hài tíng, hài pɒtê *'Sunday'*
- hài môi *'day one: Monday'*, similarly the days of the week through Saturday
- hài kɒxŏ môi *'day number one: first day'*, similarly the dates of a month
- hài dế *'noontime'*

pɒlá máng tíng *'week'*
- pɒlá máng tíng kố *'this week'*

khế *'month'*
- khế nah *'last month'*
- khế môi *'month one: January'*, similarly the months of the year

kɒxei *'in the afternoon'*
- xei kố *'this afternoon'*

la *'time'*
- la lai *'when?'*
- la me nah *'that former time'*

rôh *'period'*
- rôh nah *'ancient times'*
- rôh kố *'these times'*

rɒnó *'season'*
- rɒnó kong mei *'rainy season'*

so ah hmôi *'eventually, at some time in the future'*

Subordinated temporal expression

A subordinated temporal expression (SubTempExp) consists of a temporal subordinator (TempSub) with a following temporal demonstrative, (time reference) basic noun phrase or clause. With a following clause the temporal subordinator may be elided. *Temporal subordinators* (TempSub) form a small class which includes the following:

dế *'during, while'*; cf. vPt dế *'currently (progressive action)'*
dreng *'while'*; cf. Prep dreng *'with'* (7.5)
klei *'after'*; cf. pVb klei *'to finish'*
pơlá *'while'*; cf. Prep pơlá *'between'* (7.5)
sap *'from'*; cf. Prep sap *'from'*
trôh *'approaching, when, towards'*; cf. S Vb trôh *'to approach'*

Temporal subordinators with temporal demonstratives:
dế me *'during that (time)'*
klei me *'after that'*; functions as paragraph marker; eleventh most frequent two-word sequence in the 27,437-word text occurring 67 times
sap nah *'from former times'*

Temporal subordinator with basic noun phrase:
dế khế kố *'during this month'*
klei hơnám me *'after that year'*
trôh hài ki me *'towards that day, near that day'*

Temporal subordinator with clause:
dế gá ối tung kuat *'while he stayed in the communal house'*
dreng pin ka ah *'while we eat (in the future)'*
pơlá nôu pei bấu *'while mother pounds rice'*
trôh bấu tuam neố *'when the rice ripened some more'*

Elided temporal subordinator with clause:
Híang ái plố préi ta plố tung chea. *'(After) having* plo *(fruit) they put the* plo *in the basket.'* (SubTempExp:(T CL), B CL)
Kong hiáng xei Xôu lám ra krei. *'The afternoon having come, Xou went to trap squirrel.'* (SubTempExp:(I CL), T CL)

Sometimes the temporal phrase functions semantically in a logical sense, as follows:
me *'therefore, thus'*; cf. ResConj me (13.5)
klei me neố *'furthermore'*; cf. fPt neố *'more, again'* (10.4)

The temporal phrase may thus be summarised:

TempP: Temp/TempDem/TempNP/SubTempExp
TempNP: bNP – TempDem
SubTempExp: TempSub – TempDem/NP/CL

10.2 *LOCATIVE PHRASE*

The optional locative phrase (LocP) is a postnuclear peripheral clause element. In the locative emphasis clause (11.5) the locative phrase occurs clause initial. The bitransitive and semitransitive

clauses (9.3-4) have an indirect object as locative filled by a prepositional phrase. The semitransitive clause locative position may, in addition, be filled by any noun phrase. Whereas the bitransitive and semitransitive clauses include locative phrases by definition, all other clause types may occur with a peripheral locative phrase to establish the location, goal, recipient or means of the clause action. Locative phrases are locatives (Loc, 7.1) or prepositional phrases (PrepP, 7.5). Less than 5% of clauses in text have a peripheral locative phrase.

The locative phrase may thus be summarised:

LocP: Loc/PrepP

Á u tro ilá tung ngia. *'I continually caught thorns in the face.'* (T CL, LocP:(PrepP))

Gá ái tơdróang xôi 'báng A-Piá me. *'He did a wrong thing with that A-Pia.'*

Hơba kế pơpêng kơxah kố. *'(He) carries things upon this shoulder.'*

Gá hnai ngán tung vó me. *'He looked (for it) in that jar.'* (I CL w C Vb, LocP:(PrepP))

Préi ối a hngei hôu. *'You two stay in the house, okay?'* (Imp I CL, LocP:(PrepP), fPt)

Ái pơlê vai hông xuap. *'There is a village of theirs in the area down there.'* (Ex CL, LocP:(PrepP))

Gá dế kơtau tai. *'He's running up there.'* (I CL w S Vb, LocP:(Loc))

Vai va koi cham. *'They want to sleep down there.'* (I CL, LocP:(Loc))

10.3 *ADVERBIAL PHRASE*

The optional adverbial phrase (AdvP) is a postnuclear peripheral clause element. In the adverbial emphasis clause (11.1) the adverbial phrase occurs clause initial. The adverbial phrase modifies the predication of the verb phrase and subsumes the following semantic types: manner phrase (ManP), similitive phrase (SimP), comparative phrase (CompP), descriptive phrase (DesP), quantitative phrase (QuanP), purposive phrase (PurP), and volitional phrase (VolP). Between 10-15% of all clauses in text contain an adverbial phrase.

Adverbial phrases may thus be summarised:

AdvP: ManP/SimP/CompP/DesP/QuanP/PurP/VolP

Manner phrase

A manner phrase (ManP) describes the manner in which the predication is sustained. A manner phrase consists of one or two manner particles (ManPt) followed by a demonstrative or nominal interrogative. There are three *manner particles*: ti, to, ki (cf. RelPt ki (7.1)). The manner phrases include the following:

ti me *'like that'*; most frequent adverbial phrase and third most frequent two-word sequence occurring about 170 times in 27,437 words of text

to me, to ti me, to to me, ki me *'like that'*

ti kố, ti to kố *'like this'*

ti lai *'how, why'*; sixth most frequent two-word sequence in text occurring 128 times

ki klai *'what, for what'*

The particle ti is the sixth most frequent word in the 27,437-word text, occurring 521 times. About 70% of these occurrences are the ManPt ti, about 30% the negative vPt ti (8.4).

The manner phrase may thus be summarised:

ManP: ManPt (-ManPt) – Dem/NomInter

Kia khến gá ti me. *'That ghost spoke to him like that.'*
(Ben I CL w Q Vb, AdvP:(ManP:(ManPt, Dem)))

Á ti 'nai rơngei ti lai. *'I don't know what to sing.'*
(I CL, ManP:(ManPt, NomInter))

Eh kơtui lóang ti lai. *'Why did you trip on the stick?'*
(T CL, ManP)

Hiáng tai to me. *'(That) is all – like that.'* (Eql CL, ManP)

Similitive phrase

A similitive phrase (SimP) relates the predication to a similar event. A similitive phrase consists of the *similitive expression* (Sim) môi tiah *'the same, the same as'* optionally followed by a noun phrase or clause, or of a *similitive particle* (SimPt) trối *'like'* obligatorily followed by a noun phrase or clause. The relator particle kô may occur before the noun phrase. The similitive phrase may thus be summarised:

SimP: Sim/SimPt- (-kô-) -(NP/CL)

Similitive expression alone:

U hlo lóang môi tiah. *'(He) still saw the trees the same (as before).'* (T CL w C Vb, SimP:(Sim))

With noun phrases:

Eh va hla môi tiah ngin. *'You will die the same as us.'* (I CL, SimP:(Sim, NP))

Gá ái tei trŏi tœ́am ê ôh. *'He wasn't strong like other things.'* (Eql CL, SimP:(SimPt, NP), fPt)

Eh pro trŏi gá. *'You do (it) like him.'* (I CL w C Vb, SimP:(SimPt, NP))

Gá ko lóang trŏi nah. *'He chopped down trees like before.'* (T CL, SimP:(SimPt, NP))

Ôh ta xê trŏi chó pin. *'(It) is not like our dogs.'* (Eq2 CL, SimP:(SimPt, NP))

A hôm ái ké ki ê neŏ reh trŏi kô hme? *'Is there anything else more nourishing like rice?'* (Ex CL:(Co:(Eql CL, SimP:(SimPt kô N)))

With clauses:

Xak xoa gá tœpui môi tiah hen mœngé topui. *'His chest hairs talked the same as many people talking.'* (I CL, SimP:(Sim, I CL))

Chó trŏi gá tŏi. *'(It) is correct just like he says.'* (Eql CL, SimP:(SimPt, I CL w Q Vb))

Comparative phrase

A comparative phrase (CompP) compares the predication or the predication as modified by a following descriptive or quantitative phrase (see below) to other events. All comparative phrases have initially the *comparative particle* (CompPt) ta *'more'*. If the compared event is, by ellipsis, not included in the clause then ta occurs alone.

Gá 'nai ta. *'He knows more.'* (I CL w C Vb, CompP:(CompPt))

Gá chia lém ta. *'She became increasingly more beautiful.'* (Eql CL, CompP:(CompPt))

Else the comparative particle ta is followed by the RelPt kô and a noun phrase.

Gá ó ta kô vai koa me. *'He was more marvellous than those (other) turtles.'* (Eql CL, CompP:(CompPt, RelPt, PRefP))

Mœngé ki 'mei lui ta kô pú tung pœlê me. *'The evil person surpassed all those in that village.'* (I CL, CompP:(CompPt, RelPt, bNP))

The comparative phrase may thus be summarised:

CompP: CompPt -(RelPt NP)

There is no superlative particle; the superlative sense is given by the quantitative phrase quantifier ó *'very much'* (see below) or by the comparative phrase ta kô vai *'more than they'*.

Descriptive phrase

A descriptive phrase (DesP) adds descriptive colour to the predication. Unlike most other adverbial phrases there is no particle used to introduce the descriptive phrase. A descriptive phrase consists of a verbal adjective (vAdj, 7.1) optionally preceded by either a verbal particle (vPt, 8.4) and/or a preverb (pVb, 8.3). Not all verbal particles and preverbs, however, may occur in the descriptive phrase.

Mơngế ki me ka lém. *'That person bit (it) well.'* (I CL w T Vb, DesP:(vAdj))

Eh ối klai a kố. *'What are you doing here?'* (I CL, DesP:(vAdj), LocP)

Eh lám hơdrối, á lám kơ'nai. *'You go first, I'll go last.'* ((I CL w S Vb, DesP:(vAdj))x2)

Gá chai hiáng hơngế. *'He returned already a long way.'* (I CL w S Vb, DesP:(vPt, vAdj))

Gá ka dei kúan ôh ta be. *'He's eating his child by himself (but it) is not enough.'* (Refl T CL, DesP:(vPt, vAdj))

Chuô rah pló a hài tai? *'You (father-in-law) separate the* plo *fruit (are you) yet finished?'* (T CL, DesP:(vPt, vAdj))

Gá ôu tea me hĭang va tai. *'He's drinking that water (which is) already about gone.'* (T CL, DesP:(vPt, pVb, vAdj))

Vai ka rơkái ôh ta kai tai. *'They eat boar (but) are unable to finish it.'*

The descriptive phrase may thus be summarised:

DesP: (vPt) (pVb) vAdj

The descriptive phrase may occur among the nuclear elements if there is an object or indirect object, though a verbal particle or preverb may not occur in the descriptive phrase in this position.

Prếi trôh ache rơpám. *'The two came near the field house.'* (S CL, DesP:(vAdj))

Vai kơdrai pế lém túm kế me. *'The women cook well all those things.'* (T CL, DesP:(vAdj))

Klá hiáng ka tai chối me. *'The tiger ate all that deer.'*

Quantitative phrase

A quantitative phrase (QuanP) indicates the extent of the predication. There are three types of quantitative phrase: a quantifier phrase (QuanfP), a count noun phrase (cNP, 7.2), and a quantitative particle phrase (QuanPtP).

(1) The quantifier phrase (QuanfP) indicates the degree of attainment of the predication and consists solely of a quantifier word (Quanf).

The quantifier may occur between a preverb and main verb and thus modify the preverb specifically. The following are *quantifiers*:

ia *'a little'*
ó *'very much'*
rơlei *'exceptionally'*

Gá kơtau réng ia. *'He runs a little fast.'* (I CL w S Vb, DesP, QuanP:(Quanf))
Á rơhêng ka ká ó. *'I crave to eat fish very much.'* (T CL, QuanP:(Quanf))
Mơdei ia. *'(Sing) a little stronger.'* (I CL w mơ-Adj, QuanP:(Quanf))
Klei kong mei ah vai kơdrai va ó lám drah tung tea. *'Later after it rains the women want very much to go look (for fish) in the water.'* (TempP, I CL w T Vb, QuanP:(Quanf), LocP)
Rôh vai kra nah vai va ó xak to lái. *'In old times they wanted very much the hair of the* lai *monkey.'* (TempP, T CL, QuanP:(Quanf))
Lém rơlei. *'(She's) exceptionally beautiful.'* (Frag: DesP, QuanP:(Quanf))

(2) The count noun phrase (cNP) may occur as a quantitative phrase.
Pin rôe mam môi xôh péa hríng. *'We buy meat one time (for) two hundred (piastres).'* (T CL, QuanP:(cNP), QuanP:(cNP))

(3) A quantitative particle phrase consists of the *quantitative particle* (QuanPt) i *'until'* followed by either a verbal adjective (7.1) or a quantitative word (cf. PurPt i *'in order to'*).

Quantitative words (Quan) form a small class which includes the following and thus overlaps partially the general plural marker, quantifier, and verbal adjective word classes.

hen *'many, a lot'*
ia *'a little'*
tai *'entirely'*

Pin mén mơnat hngei i krá. *'We pat the house wall until (it's) firm.'* (T CL, QuanP:(QuanPt, vAdj))
Préi pé kơdrai i chen. *'The two cooked the woman until (she was) well cooked.'*
Á tối i ia. *'I told a little.'* (I CL w Q Vb, QuanP:(QuanPt, Quan))
Préi ka ká i tai. *'The two ate the fish up entirely.'* (T CL, QuanP:(QuanPt, Quan))
Á va ja pin xo i hen. *'I want to take us to get a lot.'* (C CL (I CL w C Vb), QuanP:(QuanPt, Quan))

The quantitative phrase may thus be summarised:

QuanP: QuanfP/cNP/QuanPtP
QuanfP: Quanf
QuanPtP: QuanPt – vAdj/Quan

Purposive phrase

A purposive phrase (PurP) indicates the purpose for the predication. A purposive phrase consists of a purposive particle (PurPt) followed by a subjectless (embedded) clause – though usually only the main verb of the clause. There are three *purposive particles* (PurPt):

i *'in order to'*; cf. QuanPt i *'until'*
u *'in order to'*; cf. pVb u *'still, continue to'* (8.3), N u *'place'*
va *'in order to'*; cf. pVb va *'to be about to'* (8.3), C Vb va *'to want'* (8.1)

The purposive phrase may thus be summarised:

PurP: PurPt – CL

Ôh ta ái kơchai i ka. *'There aren't vegetables to eat.'* (Ex CL, PurP:(PurPt, I CL w T Vb))

Gá xo hmőu u hvang. *'He got a stone (in order) to throw.'* (T CL w C Vb, Purp:(PurPt, I CL w B Vb))

Kia ki me gá khến hneng tea va ka gá. *'That ghost said (he'd) carry water in order to eat him.'* (C CL w Q Vb(T CL), PurP:(PurPt, T CL))

Xôu préi o gá xo plai tong, plai xôh hã̃ i ta tung kơchoi chai a hngei va ka. *'Xou and his younger sibling got* tong *fruit and* xoh *fruit also to put in the basket and return home in order to eat.'* (T CL w C Vb, fPt, PurP:(PurPt, S CL w B Vb)), (S CL, PurP:(PurPt, I CL w T Vb))

Volitional phrase

A volitional phrase (VolP) indicates that the predication is done in accordance with the wishes of some party. The volitional phrase consists of the volitional particle (VolPt) hmang to *'according to, according as'* followed by a clause usually containing the container verb va *'to want, desire'*. Thus:

VolP: VolPt – CL

Rơngei hmang to chuô va. *'Sing according as you (sister-in-law) want.'* (I CL, VolP:(VolPt, I CL w C Vb))

10.4 *FINAL PARTICLES*

The non-obligatory final particles (fPt) occur clause final. Final particles serve various semantic functions as noted below. Two or three final particles may cooccur as described below. About one in five clauses has a final particle. The particle kô occurs before many of the final particles without semantic significance. (Cf. RelrPt kô (7.5); kô in its various uses occurs about once for every one hundred words in text.) Final particles form a small class which includes the following:

ah, kô ah *'(future marker)'*; cf. TempDem ah *'(future marker)'*

Gá tiô pin ah. *'He will follow us.'* (T CL, fPt)

Pin ka môi ró kô ah. *'We will eat one basketful.'*

ai, kô ai *'to have just'*; ai occurs once for every one hundred words in text

Eh a hôm hlo rơtám lám tróang kô ai. *'Have you just seen a fellow going on this path?'* (C CL(S CL), fPt)

'di'do *'always, all the time'*

Gá kôk 'di'do. *'He is always crazy.'* (Eql CL, fPt)

ĕ *'(question marker)'*; occurs infrequently

Xúan me ĕ. *'The Vietnamese, huh?'* (Frag:(NP), fPt)

èh – a weak question marker, *'huh?, is that so?'*, accompanied by rising intonation; cf. Excl èh (10.6)

Xau èh? *'(You're) afraid, huh?'* (I CL w C Vb, fPt)

hã̀, kô hã̀ *'also'*; may occur non-finally or among nuclear elements

Á hiáng prei hã̀. *'I'm also tired.'* (Eql CL, fPt)

Gá hiáng pôk ko kô hã̀. *'He is also grey-haired.'*

Á ôh ta hêng hã̀ ôu koa. *'I don't crave either smoking a pipe.'* (T CL, fPt)

hẽ̀ – occurs only as hiã̀ hẽ̀ (see below)

heh – exclamatory or intensifier, accompanied by rising intonation; cf. Excl heh

Mơngế́ trối pá kô heh. *'A person like us two!'* (Frag:(NP, SimP, fPt))

Ta khên heh. *'(You) don't dare, huh.'* (Frag:(vPt, pVb, fPt))

Gá hiáng lém heh. *'He was really beautiful!'* (Eql CL, fPt)

hiã̀, kô hiã̀, hiã̀ hẽ̀, hiã̀ hã̀ *'also, etcetera, and so forth, and the like'*, may subsume more than one clause

Me pin cha ka rơkái, chi, kế́ tung kong, chối, hiã̀ hã̀. *'Then we can eat boar, barking deer, jungle animals, deer, and so forth.'* (Temp, T CL, fPt)

Pin ta mo, pin tơngie, hiã̀ hẽ̀. *'We're sick, we have malaria, etc.'* ((Eql CL)x2, fPt)

Gá krui tung ngia, tung môh, tung ma, tung túan gá hiã. *'He was scratched in the face, on the nose, in the eyes, on his ears, etc.'* (I CL, (LocP)x4, fPt)

hoh, hôh *'of course!'*

Rơngei trối kong pin hôh. *'Sing like (we do in) our country, of course!'* (Imp I CL, SimP, fPt)

Ối ti lóang hôh. *'(It) lives in a tree, of course!'* (I CL, LocP, fPt)

hôu – mild imperative, *'okay?'*; cf. T Vb hôu *'to hate'*; appropriate affirmative return comment is the Resp ôu (13.8)

Eh kôm a hngei kố hôu. *'You wait at this house, okay?'* (Imp I CL w C Vb, LocP, fPt)

Ngán hôu. *'Consider this, okay?'* (Imp I CL w C Vb, fPt)

kôh *'of course, certainly'*

Má va lám kôh. *'Of course we want to go!'*

hlái *'very'*

Gá u rơkê hlái. *'He's very clever.'*

hlối *'immediately, right away'*; frequently cooccurs with pvAdv hnối *'immediately, right away'* (8.5)

Gá pak pin hlối. *'It stung us right away.'* (T CL, fPt)

Gá hnối ối xeh tung kong, hnối chiang kia hlối. *'He right away went to live in the jungle and immediately became a ghost.'* (Refl I CL, LocP)(Eq3 CL, fPt)

me, kô me – very weak semantically, perhaps suggests slight resignation; cf. Dem me *'that'* (7.1) (with which the final particle may be confused), Temp me *'that, then'* (10.1), ContConj me *'but'* (13.3), ResConj me *'thus'* (13.5)

Vai tang rơtám Préang kơtau me. *'They heard Preang run – .'* (C CL(I CL w S Vb), fPt)

Hiáng klei hã me. *'(I) have also already finished – .'* (Frag: (vPt, pVb, fPt, fPt))

mě *'certainly, of course'*; usually occurs in brief responses

Cho mě. *'That's right, of course.'* (Eql CL, fPt)

Va mě. *'(I) certainly want to.'* (I CL w C b, fPt)

nah, kô nah *'formerly, (past tense marker)'*; cf. TempDem nah *'in the past, formerly'* (10.1)

'Bok thế á rơngei nah. *'The foreigner told me to sing.'* (C CL w Q Vb(I CL), fPt)

Ngin mot ling kô nah. *'We went in the army back then.'* (S CL, fPt)

neố, kô neố *'again, more'*; cf. pvAdv neố *'to have just'* (8.5)

Préi tɔko neő. *'The two fought some more.'* (I CL w tɔ-T Vb, fPt)
Ok neő, ka neő. *'(He) poured more. (He) ate more.'* ((I CL w T Vb, fPt)x2)

'nang, hi 'nang, pang 'nang, kô 'nang – intensifier
Me pin hla 'nang. *'And we will really be dead.'* (Temp, I CL, fPt)
Gá ton 'nang. *'He (was away) a real long time.'* (Eql CL, fPt)
Eh va ka ká pang 'nang. *'You really want to eat fish.'* (T CL, fPt)
Gá 'ló pah hi 'nang. *'He was certainly a snake.'* (Eql CL, fPt)

'nôi, kô 'nôi *'right away, the next thing, immediately'*; two of three occurrences of 'nôi are in imperative clauses (11.1)
Pro á lém 'nôi. *'Make me beautiful right away.'* (Imp C CL(Eql CL), fPt)
Á pé hme 'nôi. *'I'll cook rice next.'* (T CL, fPt)
Eh kôm a kő 'nôi. *'You wait here.'* (Imp I CL w C Vb, LocP, fPt)
Kôm kő 'nôi hôu. *'Wait here, okay?'* (Imp I CL w C Vb, fPt, fPt)

'nheh *'finally, ultimately'*
Gá kua dei rɔpie kő u kɔtê neő u hla 'nheh. *'He scraped this tongue until it broke more and (he) finally died.'* (Refl T CL, (PurP, fPt)x2)

ǒ *'okay?'*, a curt retort
Pɔ'lang ǒ. *'Bye now, okay?'*

ôh *'not, (negative intensifier)'*; one in two occurrences are in clauses with negative verbal particles ôh ta, ôh pa, pôi ta, ma ta (8.4)
Me ôh ti 'nai ôh. *'(I) do not know.'* (Temp, I CL w C Vb, fPt)
Pôi ta ám má ôh. *'No, don't give (any) to us.'* (Imp C CL, fPt)

pĕ – intensifier; sometimes occurs in imperative clauses, possibly a Bahnarism
Gá lám ko muih pĕ. *'He went to cut (his) field.'* (T CL, fPt)
Chu tői pĕ. *'Go down and tell (them).'* (Imp I CL w Q Vb, fPt)

pôih *'finally'*; frequently a discourse closer, perhaps a Bahnarism
To me pôih á tői. *'Like that, that's all, I tell.'* (AdvEmp I CL w Q Vb, fPt)

ra – intensifier, *'certainly'*
Mɔngế trői pin ra. *'A person like us certainly.'* (Frag:(NP, SimP, fPt))
Hlik va ka préi me ra. *'Really want to eat those two.'* (T CL, fPt)

tê, kô tê *'only, simply, plainly'*
Á tɔpui 'báng chu 'báng chó me tê. *'I only talk with the pigs and with the dogs.'* (I CL, (LocP)x2, fPt, fPt)

Á koi môi máng tê. *'I slept there one night only.'* (I CL, QuanP:(cNP), fPt)

xĕ *'as you know'*

Vai xang dei a kóng kố xĕ. *'They slide (them) on their arms, as you know.'* (Refl S CL, fPt)

xo *'only'*; when modifying a noun phrase object or complement frequently cooccurs with a particle (classifier?) to preceding the noun phrase

Ka tróng me xo. *'(He) only ate that eggplant.'* (T CL, fPt)

Gá ôh ta ối xo la lai. *'He didn't live only ever, i.e. he never stopped working.'* (I CL, fPt, Temp)

Tung khế ái to prei xo. *'On the moon there is only sand.'* (Loc Emp Ex CL, fPt)

Pin xau to kia tung kong xo. *'We're afraid only of ghosts in the jungle.'* (T CL w C Vb, LocP, fPt)

yoh, yôh, kô yoh *'certainly, of course'*; a Bahnarism

Klei me préi me xuan ôh ta cha koi 'báng hã̃ yôh. *'After that those two also weren't able to sleep together, of course.'* (TempP, I CL, fPt, fPt)

The above final particles may cooccur in pairs; the following pairs have been observed:

ah hã̃, kô ah hôu, ah neố, ah tê

hã̃ me, hã̃ ra, hã̃ yôh

heh 'nang

hiã̃ ah, hiã̃ hã̃, hiã̃ hẽ̃, hiã̃ me, hiã̃ neố

me ah, me nah, me pĕ, me ra, me tê

kô nah yôh

neố hoh, neố hôu, neố me, neố ŏ, neố pĕ

'nang heh, 'nang me, 'nang yôh

'nôi hôu, 'nôi tê

ôh me

kô tê hiã̃, tê hôu, tê me, tê neố, tê kô tê

Three final particles may cooccur, though only two types of combination have been observed: (1) initial me ai (fourth most frequent two-word sequence in the 27,437-word text occurring 142 times, though some such me may be Dem me) and (2) final hôu, as follows:

me ai ra, me ai me, me ai hã̃

hẽ̃ hiã̃ hôu, ah neố hôu

11. VARIATIONS OF CLAUSE TYPES

11.0 *INTRODUCTION*

Chapter 9 described the nuclear elements of the various basic clause types and chapter 10 the peripheral elements. This chapter indicates variations of the basic clauses. Two types of variation occur: permutation (11.1) and transformation (11.2). The permuted clauses are permutations of the clause elements, both nuclear and peripheral, of the basic clauses, whereas the transformed clauses are transformations of any of the basic or permuted clause types.

11.1 *PERMUTED CLAUSES*

Permuted clauses involve both postpositional and prepositional permutation of clause elements. The subject may be postposed, whereas the object, complement, locative, and adverbial phrases may be preposed.

In that these permuted clauses are permutations of the basic clauses, a two-dimensional matrix of clause types results in which one parameter is the basic clause type and the other the permuted clause type. Chart 11.1 presents this matrix and certain structural holes; resultant clause types thus are: postposed subject quotative clause, postposed subject container clause, etc.; object emphasis quotative clause, etc.

Permuted clause types:	*Basic clause types:*							
	Q	C	B	S	T	I	Eq	Ex
Norm (chapter 9)	X	X	X	X	X	X	X	X
Postposed subject	X	p	p	X	X	X	X	NO
Object/complement emphasis	p	X	X	NO	X	NO	X	X
Locative emphasis	X	p	p	p	X	p	p	X
Adverbial emphasis	X	p	p	X	X	X	X	p

Chart 11.1 Matrix of permuted clause subtypes (p indicates structural possibility; NO indicates structural impossibility; and X indicates subtype occurs in data)

Postposed subject clause

The postposed subject clause (pS CL) makes explicit the subject of the clause, seemingly, in cases where the already elided subject (cf. subject phrase ellipsis, 12.9) is determined by the speaker to require being made explicit. The postposed subject clause, rather than having the subject before the verb phrase, postposes the subject until after

the nuclear clause elements, though its position among peripheral elements is not rigid. All basic clause types except the xê *'be'* equative clause (Eq2 CL) and the existive clause may be permuted to the postposed subject clause. The resultant clauses are known as the postposed subject intransitive clause (pS I CL), etc.

The postposed subject clause may thus be summarised as follows (permuted word order is indicated in the second line):

pS CL: S – Pred – (O) – (IO) ...
Order: 1 2 (3) (4) ⟶ 2 (3)(4) 1

Ngán eh. *'Look – you.'* (pSubj I CL w C Vb)
Ti va klai hã mơngế rơtôh. *'What does he also want – the bad person?'* (pSubj T CL, fPt)
Hiáng tai klóng me. *'They're all gone – the bamboo sections.'* (pSubj Eq1 CL)

Object and complement emphasis clauses

The object and complement emphasis clauses (OEmp CL, CoEmpCL) emphasise the object of quotative, container, bitransitive, and transitive clauses or the complement of equative (excluding the xê *'be'* Eq2 and ối *'be'* Eq4 CLs) or existive clauses. In an object (or complement) emphasis clause the object (or complement) is permuted to the first or pre-subject slot of the nuclear clause. The object (or complement) phrase may also cooccur in its normal position. The resultant clauses are known as the object emphasis transitive clause (ObjEmp T CL), etc.

The object and complement emphasis clauses may thus be summarised:

OEmp CL: (S) – Pred – O – (IO) ...
Order: (1) 2 3 (4) ⟶ 3 (1) 2 (3) (4)

CoEmp (Eq1/Eq3) CL: S – Pred:Eq1 VP/Eq3 VP – Co ...
Order: 1 2 3 ⟶
3 2 1 (3)

CoEmp Ex CL: Pred – Co ...
Order: 1 2 ⟶ 2 1

OEmp CL: Gá, pa xéang véang gá me. *'He – the father spirit helped him.'* (OEmp T CL)
Kế me, gá ái. *'Those things he has.'* (OEmp T CL)
Ko gá me, préi lôi drea péang a 'ngei. *'Her head they placed on the shelf up high.'* (OEmp B CL)
Kia ki ê kố, á ta 'nai i hen. *'This other ghost I don't know much about.'* (OEmp T CL w C Vb, QuanP:(QuanPt, Quan))

CoEmp CL: Rơtám Hrái Lá inai gá. *'Youth Hrai La is his name.'* (CoEmp Eql CL)

Trúam gá pa ái. *'His hole wasn't any more.'* (CoEmp Ex CL)

Locative emphasis clause

The locative emphasis clause (LocEmp CL) emphasises the location of the predication, whether the locative phrase is a nuclear element of a bitransitive or semitransitive clause or a peripheral element of some other clause. In a locative emphasis clause the locative phrase is permuted to the clause initial position. A locative phrase may also cooccur in its normal position. The resultant clauses are known as the locative emphasis transitive clause (LocEmp T CL), etc.

The locative emphasis clause may thus be summarised:

LocEmp CL: S – Pred – (O) – Loc ...
Order: (1) 2 (3) 4 →
4 (1) 2 (3)(4)

A me ta 'blei koa. *'Over there (he) didn't beat the turtle.'* (LocEmp T CL)

A kố kia ka mơngế a kố. *'Here a ghost ate a person here.'*

Tung hngei ái kơnái. *'In the house there are rats.'* (LocEmp Ex CL)

Adverbial emphasis clause

The adverbial emphasis clause (AdvEmp CL) emphasises an adverbial aspect of the predicate of any basic clause type. In an adverbial emphasis clause the adverbial phrase is usually permuted to the clause initial position although it may also occur between the subject and predicate. An adverbial phrase may also cooccur in its normal position. A final particle may also be prepositioned following the emphatic adverbial phrase. The resultant clauses are known as the adverbial emphatic intransitive clause (AdvEmp I CL), etc.

The adverbial emphasis clause may thus be summarised:

AdvEmp CL: (S) – Pred – (O) – (IO) – AdvP (fPt)
Order: (1) 2 (3) (4) 5 (6) →
5 (6)(1) 2 (3)(4)(5)(6)
or: 1 5 (6) 2 (3)(4)(5)(6)

Ti lai gá hôm xôk 'báng vai. *'Why, why did he fool around with them?'* (AdvEmp I CL, LocP)

Ti me véang pam gá u hla. *'Like that (they) together pounded her to death.'* (AdvEmp T CL, PurP)

Rɔpap gá mot tung trap. *'Like a flash he entered into the mud.'* (AdvEmp S CL)

Trɔ́i túan pin tɔmiat gá hlo ti me. *'Like our minds thought, he saw (it) like that.'* (AdvEmp:(SimP:(SimPt, I CL w Q Vb)), I CL w C Vb, ManP)

To me pôih á tɔ́i me. *'Like that – that's all – I speak.'* (AdvEmp, fPt, I CL w Q Vb, fPt)

Kɔdrai gá rɔkê pé drôu. *'His wife skilfully cooks wine.'* (AdvEmp T CL)

11.2 *TRANSFORMED CLAUSES*

Transformed clauses are transformations of basic and permuted clauses and involve both additive and substitutive transformations. The echo subject clause, the imperative clause, the benefactive clause, the reflexive clause, the reciprocal clause, and the focus clause entail additive transformations by which a syntactic element is added to (or repeated in) the basic clause, whereas the interrogative clause entails a substitutive transformation by which a specific word is substituted for that of some syntactic element already in the basic clause.

In that these transformed clauses are transformations of both basic and permuted clauses, these transformations function as matrix multipliers of the clause types shown in the matrix of Chart 11.1. Chart 11.2 presents the matrix (of Chart 11.1) as multiplied by each of the four matrix multipliers, indicating the possibility or impossibility of occurrence structurally and the (rare) instances of occurrence in the sample analysed text.

Echo subject clause

The echo subject clause (eS CL) either emphasises the subject or clarifies the subject by amplification. The echo subject clause is a transformation of a basic or permuted clause (except the postposed subject clause), repeating or "echoing" the subject after all other nuclear and peripheral clause elements. The repeated subject phrase is either identical to the nuclear subject phrase or is an expanded clarification of it. The resultant clauses are known as the echo subject intransitive clause (eS I CL), etc.

The echo subject clause may thus be summarised:

eS CL: S – Pred – (O) – (IO) – ...
Order: 1 2 (3) (4) (5) ⟶ 1 2 (3)(4)(5) 1

Matrix multiplier / *Clause transformation type:*	*Clause permutation type:*	*Basic clause types:* Q	C	B	S	T	I	Eq	Ex
Echo subject	Unpermuted	P	P	P	P	P	X	X	NO
	Postposed subj.	NO	NO	NO	NO	NO	NO	NO	NO
	Obj./Comp. emp.	P	P	P	NO	P	NO	P	NO
	Locative emp.	P	P	P	P	P	P	P	NO
	Adverbial emp.	P	P	P	P	P	P	P	NO
Imperative	Unpermuted	P	X	P	X	X	X	X	?
	Postposed subj.	P	P	P	P	P	P	P	NO
	Obj./Comp. emp.	P	P	P	NO	P	NO	P	?
	Locative emp.	P	P	P	P	P	P	P	?
	Adverbial emp.	P	P	P	P	P	P	P	?
Benefactive	Unpermuted	X	NO	NO	NO	X	X	NO	NO
	Postposed subj.	P	NO	NO	NO	P	P	NO	NO
	Obj./Comp. emp.	P	NO	NO	NO	X	NO	NO	NO
	Locative emp.	P	NO	NO	NO	P	P	NO	NO
	Adverbial emp.	P	NO	NO	NO	X	P	NO	NO
Reflexive	Unpermuted	X	X	X	X	X	X	X	NO
	Postposed subj.	NO	NO	NO	NO	NO	NO	NO	NO
	Obj./Comp. emp.	P	P	P	P	X	P	P	NO
	Locative emp.	P	P	P	P	P	P	P	NO
	Adverbial emp.	P	P	P	P	P	P	P	NO
Reciprocal	Unpermuted	P	P	P	P	X	X	NO	NO
	Postposed subj.	NO	NO	NO	NO	NO	NO	NO	NO
	Obj./Comp. emp.	P	P	P	P	P	P	NO	NO
	Locative emp.	P	P	P	P	P	P	NO	NO
	Adverbial emp.	P	P	P	P	P	P	NO	NO
Focus	Unpermuted	P	X	P	P	P	X	X	NO
	Postposed subj.	P	P	P	P	P	P	P	NO
	Obj./Comp. emp.	P	P	P	P	P	P	P	NO
	Locative emp.	P	P	P	P	P	P	P	NO
	Adverbial emp.	P	P	P	P	P	P	P	NO
Interrogative	Unpermuted	X	X	X	X	X	X	X	X
	Postposed subj.	NO	NO	NO	NO	NO	NO	NO	NO
	Obj./Comp. emp.	*	*	*	NO	*	NO	*	*
	Locative emp.	*	*	*	*	*	*	*	*
	Adverbial emp.	*	*	*	*	*	*	*	*

Chart 11.2 Matrix of transformed clause subtypes
(P indicates structural possibility;
X indicates subtype occurs in data;
NO indicates structural impossibility;
* indicates interrogative element must correspond to permuted element)

Gá hiáng lui hã gá. *'He has also already finished – he.'* (eSubj I CL, fPt)
Gá hiáng páng kơtau kúan gá me. *'He is already able to run – his child there.'* (eSubj I CL w S Vb)
Gá môi ngế gá me. *'He is a person – he.'* (eSubj Eql CL)

Imperative clause

The imperative clause (Imp CL) expresses a command or request. All basic and permuted clause types (except the zero and xê *'be'* equative clauses (Eql and Eq2 CL) and the existive clause (Ex CL)) may be transformed to the imperative. The verbal particles ma ta *'do not'* and pôi ta *'do not'* are negative imperatives (8.4). Though there is no "positive" imperative verbal particle, the final particles hôu and pĕ (10.4) are mild imperatives. The imperative syntactic elements do not always occur in imperative clauses; thus some statistical syntactic features of imperative clauses should be noted.

(1) Only about one in three imperative clauses has an explicit subject which is usually the pronoun eh *'you'* or pó *'you all'*. Contrastively, over 70% of all basic clause types have explicit subjects.

(2) About one in two imperative clauses has the final particle hôu or 'nôi (10.4) or the compounded final particles 'nôi hôu. hôu is used only in imperative clauses; 'nôi usually, but not always, occurs in imperative clauses. The resultant clauses are known as the imperative intransitive clause (Imp I CL), etc.

The imperative clause may thus be summarised as follows (probability figures indicate likelihood of occurrence of the above element(s)):

Imp CL: (S) – Pred – ... – (hôu)('nôi)
Probability: 33% 50%

Lám tối vá hôu. *'Go and tell father-in-law, okay?'* (Imp Ben I CL w Q Vb)
Ám á túm tơdróang pơkéang 'nôi. *'Give me all kinds of magical powder.'* (Imp Ben T CL)
Eh ngán a kố. *'You look here.'* (Imp I CL w C Vb, LocP)
Kôm a kố 'nôi hôu. *'Wait here, okay?'* (Imp I CL w C Vb, LocP, fPt, fPt)
Lôi. *'Quit (it).'* (Imp I CL w B Vb)
Hơ-ùi. *'Help (me).'* (Imp I CL w T Vb)
Pin nô kố pôi ta trối vai kra nah neố. *'Now we must not (do) like the former old people any more.'* (Temp, Imp I CL w elided I Vb, SimP, fPt)

Other imperative clauses are illustrated in the following subsections.

Benefactive clause

The benefactive clause (Ben CL) specifies the beneficiary or recipient of the predication. The benefactive clause has a benefactive phrase (BenP) inserted immediately following the predicate verb phrase of a quotative, transitive, or intransitive clause. The resultant clauses are thus known as the benefactive quotative clause (Ben Q CL), etc.

The benefactive phrase consists of a pronoun, kinship term (Kin), or other animate noun (anN), and may optionally be preceded by the relator particle kô.

The benefactive clause may thus be summarised:

Ben CL: (S) – Pred – BenP – (O) ...
BenP: (kô -) Pron/Kin/anN

In clauses with the quotative verb phrase the benefactive phrase identifies the addressee.

Q CL: Vai khến gá, "Eh lám kiklai kong kố." *'They said to him, "What are you doing walking in this country?"'* (Ben Q CL(S CL, ManP))
Préi tia gá, "Hôm." *'Those two answered him, "Okay."'* (Ben Q CL (Resp))
Á tối kô pa, "Hiáng tai." *'I say to father, "It's all done."'* (Ben Q CL(Frag of Eql CL))

T CL: Á va tối eh môi tơdróang. *'I want to tell you one matter.'* (Ben T CL w Q Vb)
Á tối eh tơdráng 'nang. *'I tell you the truth for sure.'* (Ben T CL w Q Vb, fPt)

I CL: Á chu tối gá. *'I'll go down and tell him.'* (Ben I CL w Q Vb)
Kreố tai tang pơlê. *'Call all the villagers.'* (Imp Ben I CL w Q Vb)

The benefactive phrase does not occur in container clauses in that the subject of the contained clause is the beneficiary of the predication. However container verb phrases in "lower" clause types may occur with the benefactive phrase.

T CL: Ngin ám eh pơkéang. *'We give you the powder.'* (Ben T CL w C Vb)
Pin ja eh tróang hơda. *'We will show you the escape route.'*
Vai ôh ta ám kô gá hme ka. *'They don't give him rice to eat.'*

I CL: Pôi ta ám má ôh. *'Don't give us two (any).'* (Imp Ben I CL w C Vb, fPt)

The benefactive phrase with transitive verbs:

T CL: Eh pé pá drôu. *'You cook – for us – wine.'* (Ben T CL)
Má va pei pó poa drôu. *'We two want to pound – for you and grandfather – rice.'*
Á ko pá muih. *'I'll cut – for us two – a field.'*

I CL: Á muih pá. *'I'll cut (a field) for us two.'* (Ben I CL w T Vb)
Á va mơhnôu eh. *'I want to show you (it).'*

The benefactive phrase with intransitive verbs:
Gá xah chó. *'He played with the dog.'* (Ben I CL)
Chó préi kốu môi to mơnhốu. *'Their dog barked at an anteater.'* (Ben I CL)

The sample analysed text has one permuted clause with the benefactive transformation:
Xôu rơkê ó pơto vai plong. *'Xou is very skilled in taking them across by canoe.'* (AdvEmp Ben T CL)

The twenty benefactive clause transformations in the sample analysed text occur in three clause types and with three verb phrase types as follows:

Ben Q CL:	Q VP	2					
Ben T CL:	Q VP	1	C VP	7	T VP	4	
Ben I CL:	Q VP	5	C VP	0	T VP	1	I VP 0

Reflexive clause

The reflexive clause (Refl CL) specifies that the subject or agent is particularly stressed or emphasised in relation to the predication. The reflexive clause has a reflexive phrase (ReflP) inserted immediately following the predicate verb phrase of any basic clause except only the existive clause. The resultant clauses are thus known as the reflexive quotative clause (Refl Q CL), etc. The reflexive phrase consists of either of two *reflexive particles* (ReflPt):

xeh, heh *'oneself, -self'*, an emphatic reflexive
dei *'alone, one's own, for oneself, by oneself'*; cf. RecipP dei pó and FocPt dei below

The particle dei in its various uses (cf. also the reciprocal particle dei in the following subsection) is the twelfth most frequent word in the 27,437-word text, occurring 333 times, whereas the reflexive particle xeh ranks 45, occurring 121 times.

The reflexive clause may thus be summarised:

Refl CL: (S) – Pred – ReflP – ...
ReflP: xeh/dei

xeh: Gá u mot xeh tung trap me. *'He himself entered into that mud.'* (Refl S CL)

Gá ka rơnua xeh tea hẽ gá me. *'He himself swallowed his spittle.'* (Refl T CL)

Eh xo heh dôh kơbố kô hã. *'You yourself also get what son-in-law?'* (Refl T CL w C Vb, fPt)

Préi ối xeh 'báng me. *'The two themselves lived together there.'* (Refl I CL, LocP)

Me gá loi xeh 'nang. *'Then she herself really believed.'* (TempP, Refl I CL w T Vb, fPt)

dei: Gá ta dei kơxêt tung vó. *'He put for himself the mushroom in the jar.'* (Refl B CL)

Gá preố dei pơlê. *'He returned to his own village.'* (Refl S CL)

Gá hlo dei ngoh. *'He saw his own brother.'* (Refl T CL w C Vb)

Gá pôu dei vai 'néng me. *'She carried by herself the young ones.'* (Refl T CL)

Gá ka dei kơdrai me hiáng tai. *'He ate by himself the woman all up.'* (Refl T CL, DesP:(vPt, vAdj))

Klei me gá tơmiat dei. *'After that he thought to himself.'* (TempP, Refl I CL w Q Vb)

Gá lám muih dei neố. *'He went to cut the field some more for/by himself.'* (Refl I CL w T Vb, fPt)

Gá hma bong dei a xiam tróng. *'He was used to urinating alone at the base of the eggplant.'* (Refl I CL, LocP)

The sample analysed text has one permuted clause and three transformed clauses with the additional reflexive transformation:

Kúan gá pôu dei ing róng kố. *'The child – she carried (him) by herself on this back side.'* (OEmp Refl T CL, LocP)

Nô kố gá hiáng mơjo dei neố A-Piá me ai. *'Now she already loved (him) for herself some more – that (Miss) A-Pia.'* (Temp, eSubj Refl I CL, fPt)

Nô kố eh búa ngán dei. *'Now you try and see for yourself.'* (Temp, Imp Refl I CL w C Vb)

Hơbai xeh ah. *'(You) yourself watch out!'* (Imp Refl I CL, fPt)

The 64 reflexive clause transformations of basic clauses in the sample analysed text occur in seven clause types and with seven verb phrase types as follows:

Q CL:	Q VP	1												
C CL:	Q VP	1												
B CL:					B VP	1								
S CL:					B VP	1	S VP	5						
T CL:	Q VP	2	C VP	8					T VP	16				
I CL:	Q VP	2	C VP	4	B VP	2	S VP	2	T VP	6	I VP	11		
Eq CL:	Eq VP	2												

Reciprocal clause

The reciprocal clause (Recip CL) expresses mutual action by and upon two or more agents. The reciprocal clause has the reciprocal phrase (RecipP) inserted immediately following the predicate verb phrase of any basic clause except the equative and existive clauses; the verb may be prefixed with the reciprocal affix tơ- (see 12.2). The resultant clauses are thus known as the reciprocal quotative clause (Recip Q CL), etc.

The reciprocal phrase is dei pó *'together, with each other'* (pó is the dual-plural second person pronoun *'you-all'*).

The reciprocal clause may thus be summarised:

Recip CL: (S) – (tơ-)Pred – RecipP – (O) – ...
RecipP: dei pó

Ah préi mơnhén dei pó. *'Thereafter the two argued with each other.'* (Temp, Recip I CL)

Me préi tơkat dei pó. *'Then the two wrestled with each other.'* (Temp, Recip I CL w tơ-I Vb)

Préi tơhôu dei pó. *'The two hated each other.'* (Recip I CL w tơ-T Vb)

Gá va rôu dei pó khu kia me ai. *'He wanted to call together the group of ghosts.'* (Recip T CL, fPt)

The seven reciprocal clause transformations of basic clauses in the sample analysed text occur in two clause types and with three verb phrase types as follows:

T CL:			T VP	1		
I CL:	C VP	1	T VP	2	I VP	3

Focus clause

The focus clause (Foc CL) indicates to whom the predicate is related – though the semantic homogeneity of this clause type is somewhat elusive. The focus clause has a focus phrase (FocP) inserted immediately following the predicate verb phrase of any clause except the existive clause.

The resultant clauses are thus known as the focus quotative clause (Foc Q CL), etc.

The focus phrase consists of the focus particle (FocPt) dei (cf. reflexive particle dei above) and a following pronoun (but not pó *'you all'* – cf. reciprocal phrase dei pó above), kinship term, or animate noun.

The focus clause may thus be summarised:

Foc CL: (S) – Pred – FocP – (O) – ...
FocP: dei – Pron/Kin/anN

dei kɔdrá: Nô kó gá pɔchan thé dei kɔdrá i chu ôu drôu. *'Now he advised and commanded with the in-laws to come down and drink wine.'* (Temp, Foc I CL w Q Vb, PurP:(PurPt, T CL))

Ôh ta loh dei kɔdrá kɔtra pɔpêng tɔnei ôh. *'(He) did not allow for the in-laws to step upon the ground.'* (Foc C CL(S CL), fPt)

dei dôh: Klei me gá chiang kɔmei dei dôh neó. *'After that he became ashamed before his son-in-law more.'* (Temp, Foc Eq3 CL, fPt)

dei o: Xôu tó dei o ti me. *'You laughed at his younger sibling like that.'* (Foc I CL, ManP)

Klei me Xôu kôm dei o. *'After that Xou waited for his younger sibling.'* (TempP, Foc I CL w C Vb)

The sample analysed text has one transformed clause with the additional focus transformation:

Eh kua dei pa. *'You hug your own father.'* (Imp Foc I CL w T Vb)

The six focus clause transformations of basic clauses in the sample analysed text occur in three clause types and with four verb phrase types as follows:

C CL:	Q VP	1	C VP	1			
I CL:	Q VP	2			I VP	1	
Eq CL:						Eq VP	1

The above four clause transformations each entail insertion of a phrase immediately following the predicate verb phrase. These four phrases are here summarised:

BenP: (kô -) Pron/Kin/anN
ReflP: xeh/dei
RecipP: dei pó
FocP: dei – Pron/Kin/anN

Interrogative clause

The interrogative clause asks a question. All basic clauses may be transformed to interrogative clauses. The "emphatic" permuted clauses may be transformed to interrogative clauses only if the permuted element corresponds to the interrogative element of the clause. Of the above transformed clauses only the benefactive clause may be further transformed to (benefactive) interrogative clauses.

The interrogative clause entails the substitution of an interrogative word in the syntactic element of a clause or phrase being questioned. Interrogative clauses have been identified by the question mark rather than in the clause formula following each example.

Interrogative words have been included in various sections of the preceding chapter because of their varying syntactic features. In this section the various interrogative forms are summarised with reference to the relevant sections.

kơbố *'who?'*, Pron (7.1)
klai *'which?, what?'*, NomInter (7.1)
kiklai *'which?, what?*, NomInter (7.1)
lai *'which?, what?'*, NomInter (7.1)
u lai *'where?'*, N-NomInter (7.1)
to lai *'how many?, how much?'*, NumInter (7.2)
a hôm, hôm *'(yes-no question marker)'*, vPt (8.4)
a hài, hài *'yet?'*, vPt (8.4)
la lai *'when?'*, Temp (10.1)
ti lai *'how?, why?'*, ManP (10.3)
èh *'huh?, is that right?'*, fPt (10.4)
hôu *'okay?'*, fPt (10.4)

11.3 *FREQUENCY OF CLAUSE TYPE VARIATIONS*

Chart 11.3 indicates the frequency of all clauses in the sample analysed text, distinguishing both permuted and transformed clause types. The unpermuted, untransformed clause total (581) corresponds to those clause types presented in Chart 9.3 (section 9.9). (Interrogative clauses were not counted separate from other clause types in that their syntactic feature is word class substitution rather than permuted word order or additive transformation.) Over 75% of the clauses are of the unpermuted-untransformed type. Clause transformations (136) are more numerous than clause permutations (40). Reflexive clauses (64) occur more than three times as often as any other clause variation. Double transformation clauses are rare (7); but transformations of permuted clauses are exceedingly rare in natural text (1).

	Clause transformations:								
	Basic	eSubj	Imp	Ben	Refl	Recip	Foc	Inter*	*Total*
Basic CL	581	5	34	20	64	7	6	-	717
Permuted CLs:									
Postposed subject	13								13
Obj/Comp Emp.	14				1				15
Loc. Emp.	2								2
Adv. Emp.	11								11
Total	621	5	34	20	65	7	6	-	758
Double-transformation CLs:									
eSubj-Refl		(1)			(1)				1
Imper-Refl			(5)		(5)				5
Imper-Foc			(1)				(1)		1
Total									765

Chart 11.3 Frequency of all clause types in sample text distinguishing permuted and transformed clauses (*not counted separately)

12. AFFIXATION, REDUPLICATION, ETC.

12.0 *INTRODUCTION*

Apart from the noun and verb phrases, the basic clause types with nuclear and peripheral elements and variations of them described in the preceding chapters, there are other somewhat "miscellaneous" syntactic features which pertain to clauses. These are collected together and discussed in this chapter before proceeding to a discussion of a higher syntactic level in chapter 13.

The principal syntactic feature discussed here is the occasional affixation found in Sedang encompassing four major affixes (causal (12.1), reciprocal (12.2), adversative (12.3), nominal (12.4)) and several minor affixes (12.5). Sedang affixation has been previously described in Smith (1969a) using a generative transformational grammar model.

The remaining sections of this chapter discuss such miscellaneous topics as morpheme reduplication, repetition, recapitulation, expansion, series, ellipsis and clause fragments, onomatopoeia, special descriptives and poetic form.

12.1 *CAUSAL AFFIXES* pơ- *AND* mơ-

The causal affixes prefixed to a verb (except quotative, equative, or existive verbs) or verbal adjective transform these to a transitive verb in which the subject as actor "causes" the stated predication upon the object as undergoer. The affixes are semiactive, in that they may not be indiscriminately affixed to semantically viable verbs though occasionally a native speaker may use it in a new or novel situation.

There are two causal affixes: pơ- and mơ-. The affixes may be prefixed only to monosyllabic words; yet only about 30-40% of presyllable pơ- or mơ- in verbs are the causal affix – the others are bisyllabic words whose presyllable (today) has no semantic value of its own. pơ- characteristically occurs with those words having initial voiceless consonants, and mơ- with those having initial voiced consonants or initial (written) vowels. But there are exceptions to both of these generalisations. Furthermore there are morphophonemic changes in which the initial voiceless consonant of some verbs becomes voiced. Some words occur with both affixes.

mơ- with morphophonemic change:

S Vb:	tá *'to go around'*	mơdá *'cause to go around'*
vAdj:	tang *'to be erect'*	mơdang *'cause to be erect'*
	tei *'to be strong'*	mơdei *'cause to be strong'*
	chai *'to be sick'*	mơjai *'cause to be sick'*
	ton *'long time'*	mơdon *'cause to be long time'*

mơ- without change:

T Vb:	at *'to fast'*	mơ-at *'cause to fast'*
	há *'to open mouth'*	mơhá *'cause to open mouth'*
	hriam *'to study'*	mơhriam *'to teach'*
I Vb:	àu *'to nurse'*	mơ-àu *'cause to nurse'*
	huam *'to bathe'*	mơhuam *'cause to bathe'*
vAdj:	gok *'crowded'*	mơgok *'cause to crowd'*

Affixation with pơ-:

C Vb:	lôi *'to abandon'*	pơloi *'cause to abandon'*
B Vb:	kúm *'to pile'*	pơkúm *'cause to be piled'*
S Vb:	chai *'to return'*	pơchai *'cause to return'*
T Vb:	'blei *'to beat'*	pơ'blei *'cause to beat'*
vAdj:	chen *'well cooked'*	pơchen *'cause to be well cooked'*
	reh *'to be alive'*	pơreh/mơreh *'to nourish'*

pVb: klei *'to finish'* pɔklei *'cause to finish'*

Some affixed forms have (vestigial?) vowel nasalisation and/or consonantal preglottalisation not in the unaffixed forms.

T VB: ôu *'to drink'* mɔ-ȍu *'cause to drink'*
I VB: riu *'to awake'* mɔ'riù *'cause to awake'*
vAdj: reh *'to be alive'* mɔ'reh/pɔ'rèh *'to resurrect'*

Á mɔdang lóang. *'I lift up the pole.'* (T CL w mɔ-vAdj)
Á pɔklei chén. *'I make finished (pay off) a debt.* (T CL w pɔ-pVb)
Kɔdrai mɔdot chu. *'The woman stops the pig.'* (T CL w mɔ-I Vb)
Á mɔhriam eh túm tɔdróang. *'I will teach you all things.'* (Ben T CL w mɔ-I Vb)

Other causal morphophonemic changes seem evident in the following otherwise irregular pairs:

chu *'to go down'* and
ju *'to let down';*

mui *'to go under water'* and
'mui *'to put under water'*

In rapid speech the presyllable mɔ- may be taken to be a contraction of mot *'to enter'* in some instances. For example:

Gá híang ǒi a kíng tea gá mɔhuam. *'He was at the edge of the water (and) he went in to bathe.'* (I CL, 1 CL)
Kia mɔkoi tung kuat. *'The ghost went in to sleep in the communal house.'* (I CL)

12.2 *RECIPROCAL AFFIX* tɔ-

The reciprocal affix prefixed to a transitive verb (or verb which may occur in a T CL) usually indicates that the predication is "reciprocal" between those of the (necessarily plural) subject. The reciprocal affix is tɔ-. Sometimes, however, tɔ- indicates only that the (plural) actors perform the predication together though not upon each other. The affix may be prefixed only to monosyllabic verbs; yet only about 30-40% of presyllable tɔ- in verbs are the reciprocal affix. There are no morphophonemic alternations with reciprocal affixation except that with initial t roots the affix sometimes is ti- (4.4). The verbal phrase with included reciprocal affix usually occurs in the reciprocal clause followed by the reciprocal phrase dei pó *'with each other'* (11.2). The reciprocal affix appears to be an active affix, applicable to new situations.

Má tɔchúa dei pó. *'We two obey each other.'* (Recip T CL w tɔ-T Vb)

Préi tɔvéang dei pó. *'Those two help each other.* (Recip T CL w tɔ-T Vb)

Me préi tɔhlo dei pó. *'Then those two saw each other.'* (Temp, Recip T CL w tɔ-C Vb)

Vai tɔko dei pó, tɔpak dei pó. *'They cut each other, stabbed each other.'* ((Recip T CL w tɔ-T Vb)x2)

12.3 *ADVERSATIVE AFFIX* lɔ-

The adversative affix prefixed to a verb (except equative or existive verbs) indicates that the (potential) (object as) undergoer is liable to the "adversity" of the predication. The adversative affix is lɔ-. There are no morphophonemic changes involving affixation with the adversative affix. The adversative affix seems to be an active affix and appears to be used with more verbs and with greater frequency than the causal or reciprocal affixes. The adversative affix frequently cooccurs with the verb xau *'to be afraid'*.

Poa eh lɔhôu má. *'Grandfather, you hate us two.'* (Voc, T CL w lɔ-T Vb)

Pin xau rɔkái lɔlo. *'We're afraid boar will go through (into our gardens).'* (C CL (I CL w lɔ-S Vb))

Gá lɔmot tung kố. *'He entered into here (to bother us).'* (S CL w lɔ-S Vb)

Though the adversative affix generally is affixed only to monosyllabic verbs, its affixation to a bisyllabic verb has been noted.

Á xau eh lɔkɔdê á. *'I'm afraid you will kill me.'* (C CL(T CL w lɔ-T Vb))

Such a trisyllabic word gives rise to the possible analysis of lɔ- as a verbal particle: (1) no other affix is prefixed to a bisyllabic word and trisyllabic words are not otherwise within the established syllable pattern; (2) the vowel of lɔ- is sometimes spoken as a phonetic [o] with slight stress, whereas the presyllable vowel is always schwa and unstressed except in intentionally slow speech; (3) lɔ- is, suspiciously, considerably more productive than the other affixes with respect to the number of verbs with which it occurs; and (4) neighbouring languages do not have such an affix although the other Sedang affixes are typical of the area. On the other hand, it has been analysed here as a prefix because (1) of the general phonological pattern established by its typical unstressed schwa vowel and (2) psycholinguistic reaction has been favourable (Smith, 1969a:124-5).

12.4 *NOMINAL AFFIX -σn-*

The nominal affix infixed to a monosyllabic verb (except equative and existive verbs) "nominalises" it to form a semantically related noun. The semantic relationship of the derived noun to the verb, however, is not predictable but may be instrumental, resultant, or locative. The nominal affix is -σn-, and is infixed between the initial consonant and following vowels forming a two-syllable word. If the initial consonant is part of a consonant cluster with a following r, then, because -nr- is not a permitted consonant cluster, the nominal infix has the form -σd-. Because there are more initial consonants than presyllable types, there are various morphophonemic changes of the initial consonants to permitted presyllable consonants. All observed infixation patterns are summarised in Chart 12.1. The presyllable pσ- is not utilised because of voicing of initial p to m. It is inexplicable (or only an erratic statistical phenomenon?) why verbs with the otherwise relatively common

Verb initial:	*Presyllable type:*				
	hσ-	kσ-	mσ-	rσ-	tσ-
ch-	hσn-				
h-	hσn-				
x-	hσn-				
d-		kσn-			
k-		kσn-			
kl-		kσn-			
kr-		kσdr-			
b-			mσn-		
p-			mσn-		
pr-			mσdr-		
r-				rσn-	
t-					tσn-
tr-					tσn-

Chart 12.1 Nominal affix -σn- infixation patterns

initial consonants l, m, and n do not have nominalised forms. The nominal affix appears to be active, usable in new situations.

chia *'to dig'*	hơnia *'shovel-hoe'*
hea *'to vomit'*	hơnea *'spewing instrument: gun'*
xóang *'to divide'*	hơnóang *'problem'*
dea *'to add water'*	kơnea *'T-stick for measuring water in wine jar'*
kang *'to fence'*	kơnang *'fence'*
kléang *'to make trough'*	kơnéang *'trough'*
krốu *'to roll'*	kơdrốu *'ball'*
búa *'to test, try'*	mơnúa *'test'*
pán *'to raise'*	mơnán *'domestic animals'*
prán *'to bait'*	mơdrán *'bait'*
ra *'to ambush'*	rơna *'a trap'*
tiam *'to hammer'*	tơniam *'forge'*
tréng *'to cut'*	tơnéng *'cutting board'*

12.5 *MINOR AFFIXES*

There are several minor affixes: the nominal affix kơ-, the digital affix tơ-, the ordinal affix mơ-, and the velar animal affix.

Nominal affix kơ-

The nominal affix kơ- is prefixed to loan — mostly Vietnamese — substantives. This is a loan arising from the Vietnamese classifier cái which precedes many of these words in Vietnamese.

kơ'bang *'a table'*	VN: cái bàn
kơhôp *'a can'*	cái hộp
kơkeố *'a bottle'*	cái kéo
kơli *'a glass'*	cái ly
kơmaĭ *'a machine'*	cái máy

Digital affix tơ-

The digital affix tơ- is used in three instances with the numbers two to four to indicate fingers' width; in one instance there is an inconsistent voicing of the initial consonant.

péa *'two'*	tơbéa *'two fingers' width'*
pái *'three'*	tơpái *'three fingers' width'*
pún *'four'*	tơpún *'four fingers' width'*

Ordinal affix mɔ-

Borrowed from Bahnar, the ordinal number affix mɔ- is prefixed to the monosyllabic numbers one through four and, less commonly, other numbers. More typical in Sedang is the ordinal number phrase ki Num (7.1-2).

mɔmôi, ki môi *'first'*
mɔpéa, ki péa *'second'*
mɔpái, ki pái *'third'*
mɔpún, ki pún *'fourth'*

Velar animal affix relic

A disproportionately large number of animal names begin with the velar k. The possibility that this might be a relic of a hypothesised velar animal prefix is intriguing and is explored in Smith (1975).

12.6 *MORPHEME REDUPLICATION*

There are two types of morpheme reduplication: complete and partial.

Complete morpheme reduplication

("Complete") morphemes of various classes (usually verbs, verbal adjectives, and adverbial elements) are repeated or reduplicated in their entirety for emphasis or intensification. Reduplicative concatenation of main verbs in the verb phrase (8.2) indicates a repeated or prolonged action.

tei *'strong'*, tei tei *'very strong'*
Gá khến gá tei tei ta. *'She said that he is much stronger.'*
(C CL(Eql CL, CompP) w Q Vb)

túan *'ear; smart'*, ta *'(comparative)'*
Gá túan túan ta ta. *'He is much much smarter (than they).'*
(Eql CL, CompP)

Complete morpheme reduplication may be extended to the story-telling device of repeating phrases to indicate prolongation or repetition of an action.

Kia kɔchôu kɔhèa kɔchôu kɔhèa kɔchôu kɔhèa. *'The ghost spit spittle, spit spittle, spit spittle.'* (T CL)

Partial morpheme reduplication

Reduplication of a part of a morpheme is (generally) a storytelling style which heightens the climactic points and affords establishment of a rhythm between stressed and unstressed syllables. Apart from interrogative reduplication (see below) partial morpheme reduplication

is, like presyllable reduplication (4.4), the reduplication of the initial consonant or consonant cluster of (monosyllabic) verbs in the presyllable with a presyllable i or u vowel or reduplicated main syllable vowel. Some story tellers use this device with, seemingly, few constraints.

ka *'to eat'*; reduplication: kuka

mot *'to enter'*; reduplication: mimot

Me 'ni'no kuka mimot tung me. *'(The snake) came out (of the water), killed (the girl), and entered into that (water).'* (TempP, S CL)

Bibrôk lulea klea pah. *'(He) went and slit open the snake's intestines.'* (T CL)

Interrogative reduplication is an emphatic response to the unreduplicative interrogative.

ki klai *'what?'*,

ki klai ki kla *'who knows what?'*;

la lai *'when?'*,

la lai la la *'who knows when?'*;

u lai *'where?'*,

u lai u la *'who knows where?'*;

to lai *'how many?'*,

to lai to la *'who knows how many?'*

12.7 *REPETITION, RECAPITULATION, EXPANSION*

In their oral development, clauses may be interrupted for repetition, recapitulation or expansion with another syntactically complete but reduplicative phrase. Expansion of the verb phrase is seen in verbal concatenation (8.2). The interruption never occurs after a particle linked to a following phrase but usually after an otherwise syntactically completed element of the clause. The interruption is usually marked by juncture.

Subject phrase:

Ah o gá me, A-Piá me ái khḗn... *'Later on his younger sibling, that A-Pia said...'* (Temp, Q CL:((S)x2, Pred))

Kia ki me, gá khḗn — ô-ôh. *'That ghost, he said "No."* (Q CL:((S)x2, Pred, O))

Klei me préi óng meh, préi lám péng chêm. *'After that the two brothers-in-law, the two went to shoot birds.'* (TempP, T CL: ((S)x2, Pred, O))

Object phrase:

Kia ám gá pơkéang, tum tơdróang. *'The ghost gave him powder, all things.'* (Ben T CL:(S, Pred, (O)x2))

Hơgah kố ka mám tóng kô á, chám tóng kô á. *'This Hogah ate my stolen food, my stolen meat.'* (T CL:(S, Pred, (O)x2))

Préi lám péng chêm, chêm lóang plai trai. *'The two went to shoot birds, banyan fruit tree birds.'*

Gá kơtúa kơtei mơngế, kơtei rơkái, kơtei chối. *'He hung up human buttocks, boar buttocks, deer buttocks.'* (T CL:(S, Pred, (O)x3))

Complement phrase:

Kơnốu á mơngế rơtôh, mơngế 'mei. *'My husband is a bad person, an evil person.'* (Eq1 CL:(S, (Co)x2))

Pơkéang chiang kơlá, kơlá 'drun 'dra. *'The powder became bamboo, bamboo real thick.'* (Eq3 CL:(S, Pred, (Co)x2))

Locative phrase:

Á u tro tung ngia kô hiã, tung cha kô tê. *'I scraped thorns in my face, in my body and so forth.'* (T CL, (LocP, fPt)x2)

Gá ái tơdróang xôi 'báng gá, 'báng A-Piá me. *'He did wrong with her, with that A-Pia.'* (T CL, (LocP)x2)

Adverbial phrase:

Me gá tuveh mo heh ta kô vai, lém heh ta kô vai. *'Then he himself returned healthier than they, handsomer than they.'* (Temp, Ben I CL w S Vb, (DesP, CompP)x2)

Another form of expansion is through the linking of appropriate phrases with a *coordinating conjunctive* (CoConj) without juncture. The coordinating conjunctives are:

'báng *'with, and'*
la *'or'*
ôh *'or'*; cf. negative particles ôh (8.4, 10.4)
thau *'whether ... or'*

Klá me 'báng tơná kia me klê tea me neố. *'That tiger and that host of ghosts crossed that water again.'* (S CL:(S, CoConj, S, Pred, O), fPt)

Nô kố á tối eh tơdróang Kia Té Tôu 'báng Kia Tơpa Ko. *'Now I tell the story of Long Breasted Ghost and Double Headed Ghost.'* (TempP, Ben T CL w Q Vb:(S, Pred, O:(N,((N, PName), CoConj, (N, PName)))))

Á 'nai ôh thau môi hơnám thau péa hơnám. *'I don't know whether one year or two years.'* (I CL w C Vb, fPt; Frag:((CoConj, cNP)x2))

Tung pơlê ái môi ngế kán pơlê ôh chu léang. *'In a village there is one* kan pole *village chief or (one)* chu leang *village chief.'* (LocEmp Ex CL:(Co:(NP, Conj, NP)))

Búa ngán hôm chiang môi tiah la ôh. *'Try and see (whether they) are capable the same or not.'* (C CL(Eq3 CL, CoConj, Frag:(fPt)))

Expansion of more than one element of a clause – especially of the final elements – is also common but might equally be considered an instance of ellipsis of the earlier elements (12.9).

Eh va pro mơngéang. *'You are about to make black ants, to make red ants.'* (T CL:(S, pVb, ((C Vb, O)x2)))

Pin kúa pố kúa kiklai. *'We scrape melons, scrape whatever.'* (T CL:(S, (Pred, O)x2))

Á xôk 'báng vai drôh ki ê, xôk 'báng kơdrai ki ê ôh. *'I did not fool around with different girls, fool around with other women.'* (I CL:(S, (Pred, LocP)x2), fPt)

Eh mơngế chiang pro túm tơdróang, chiang pơxeh hã. *'You will be a person creating all things, doing miracles also.'* (Eq1 CL(T CL; I CL, fPt))

Hmui, ki klai hiã chiang mơngế, chiang mơngế tai tang, chiang môi to pơlê kan. *'Ants, whatever, etc. became people, became people entirely, became one big village.'* (Eq3 CL:((S)x2, fPt, (Pred, Co)x3))

12.8 *SERIES*

Series of single or multiple clause elements frequently cooccur with one of three *series particles* (sPt): hiã, 'lo or 'na. 'na usually refers to indefinite groups of people (7.1).

Préi chai a hngei ka dei 'na, préi tê dei 'na hã. *'The two returned home to eat, the two sold their (things) also.'* (S CL, Refl I CL w T Vb, sPt; Refl I CL w T Vb, sPt; fPt)

Vai ka, mau 'na ka pôh, mau 'na ka prông, mau 'na ka pé, hmang to vai tơmiat xeh. *'They ate, some ate roasted, some ate steamed, some ate cooked, according as they themselves thought.'* (I CL w T Vb, (T CL:(S, sPt, Pred, O)x3), VolP)

Tai tang pơlê va ka ro 'lo, chu 'lo, í 'lo. *'The whole village was about to eat beef, pork, chicken.'* (T CL:(S, Pred, (O, sPt)x3))

Klei mot tung kong vai péng chèm hiã, ra chói hiã, xế ká hiã. *'After entering the jungle they shot birds and ambushed deer and caught fish, etc.'* (TempP:(TempSub, S CL), T CL:(S,(Pred, O, sPt)x3))

12.9 *ELLIPSIS AND CLAUSE FRAGMENTS*

Ellipsis is the omission of a word or phrase considered essential for grammatical completeness but not for the conveyance of the intended meaning. Ellipsis occurs frequently and indicates, together with pronominalisation and responses (13.8), the common dependence of one clause on another. Elided elements are always recoverable from the preceding discourse. Items elided commonly include the head noun of noun phrases, the subject (such ellipsis was indicated as "optional" in the clause formulas (chapter 9)), the main verb of verb phrases (as indicated by the word "potential" in the definitions of clause types), the verb phrase, and the noun phrase of prepositional phrases. Ellipsis of the indirect object phrase in the bitransitive clause is accounted for in the transitive clause. Ellipsis of the (direct) object phrase is accounted for in clause subtypes: semitransitive clause from bitransitive clause, and intransitive clause from quotative clause, container clause, or transitive clause.

Noun phrase head ellipsis:

Nô kố môi hiáng khến môi cháu, môi hiáng khến môi poa. *'Now one (person) has called one (person) grandchild, one (person) has called one (person) grandfather.'* (Temp, Ben T CL w Q Vb)x2)

Subject phrase ellipsis:

Me kreố — mot. *'Then (he) called, "Enter."'* (Temp, Q CL(Imp I CL w S Vb))

Main verb ellipsis:

Pơ-ia va cha A-Piá me neố. *'In a little bit (he) was about able to (catch) that A-Pia again.'* (Temp, T CL w elided T Vb, fPt)

Eh ta hro. *'You are unable (to pound rice).'* (I CL w elided T Vb)

Verb phrase ellipsis:

Klei me pa gá — ma ta preố a hngei. *'After that his father (said), "Don't return home."'* (TempP, Q CL(Imp S CL) w elided Q Vb)

Noun phrase of prepositional phrase ellipsis:

Á va lám 'báng. *'I want to go with (you).'* (S CL)

Klei me préi lám dreng va to kông i chai a hngei. *'After that the two went together (with each other) to climb the ladder to return home.'* (TempP, S CL, (PurP)x2)

Extensive ellipsis culminates in retention of only a single major clause element — a clause fragment (Frag). A clause fragment may co-occur with peripheral clause elements or may consist solely of a verbal particle and/or a preverb, a noun phrase, a locative phrase, an adverbial

phrase, or a temporal phrase. Vocatives, exclamations, and responses (10.5-7) are sometimes isolated like clause fragments.

Hiáng. *'(I) already (saw the tiger).'* (vPt)

Ôh ta kai. *'(The child) is unable (to climb into the house).'* (vPt-pVb)

Hiáng klei hã̃ me. *'(The woman) had already finished (winnowing the rice) also.'* (vPt-pVb, fPt)

Va. *'(I surely do) want (to go to Kontum).'* (pVb)

Chó kia me. *'(It was) the dog of that ghost.'* (bNP)

A chiak. *'(They slept) in the field.'* (PrepP)

Ti me. *'(Sedang sing) like that.'* (ManP)

Môi tiah hen mɔngé. *'(The chest hairs sing) the same as many people.'* (SimP)

Ah ton ton ton ton. *'A long long long long time afterward (it happened).'* (TempP)

12.10 *ONOMATOPOEIA*

Sounds of animals and activities are mimicked by phrases which fit the phonology of the language though usually consist of several (phonological) words.

drih drih drih — *sound of drums and gongs*

hnhek hnhek hnhek — *sound of a hoarse voice*

pok pok pok — *sound of a clear voice*

ro ko rop — *sound of horses galloping*

tutoah tutoah tutoah — *sound of two people pounding rice together*

tutoah toah tutoah toah tutoah toah — *sound of three people pounding rice together*

'blé 'blá 'blé 'blá — *sound of thunder*

12.11 *SPECIAL DESCRIPTIVES*

The verbal adjectives described in 7.1 are typically only one (phonological) word. There are other descriptives which because of their phonological and/or semantic complexity require specific mention.

Register contrastive descriptive pairs

Some special descriptive word pairs which contrast size differ only, or significantly, by phonological register. Words of the lax register represent the larger; words of the tense register represent the smaller.

khei *'red, of normal size'* (LR)

kléi *'red, but very tiny'* (TR)

rɔmon *'large and black'* (LR)
rɔmón *'small and black'* (TR)

rɔ'buang *'large hole'* (LR)
rɔ'bɔ́ *'small hole'* (TR)
rɔ'biú *'tiny hole'* (TR)

tɔtia *'large flying squirrel'* (LR)
tɔtúa *'small flying squirrel'* (TR)

Phonologically similar descriptive pairs

Some descriptive word sets have significant phonological similarity, frequently uncommon consonant clusters. If there is any morphological significance herein, however, it has been lost and is seemingly unrecoverable.

hɔdrah *'big'*
hɔdreng *'little'*

mot *'enter (one person)'*
'mot *'enter (many people)'*

rɔduang *'a large, short elderly person, confined to one place'*
rɔdúang *'a large, short young person, confined to one place'*

tɔngroh *'a large, tall elderly sick person'*
tɔngrén *'a thin young person, not moving about'*

rɔnúang *'a large tall young person confined to one place'*
rɔ'nuak *'a large, tall young person moving about'*

'nuɔ́ *'a short and fat young person'*
a'nuh *'a short and fat elderly person, sitting down'*
ahnhuh *'a short and fat elderly person, walking about'*

rɔ'mok *'a tall, fat young person'*
rɔ'mo *'a fat young person, average height'*

Reduplicative descriptive terms

Some special descriptives consist of phonologically (partially) reduplicated words.

rê rɔ́ng — *description of a fearful cry*
'drun 'dra — *description of dense bamboo*
glá gláng glá gláng — *description of leaves flying hither and yon*
kɔ'blôu kɔ'blá — *description of place crowded with people*
nunit nunit — *description of slowly moving things, as two persons in a line, a frog, a duck*

hnô hɔnôe – *description of gentle slope of hill*
hɔdru hɔdra – *description of a long, single file*
pɔlau pɔlă pɔlau pɔlă – *description of way fish move about*
prêprêp praprap – *description of water leaking out quickly*
rɔmie rɔmam – *description of very many people*
rɔ'mak rɔ'mián – *description of lots of blood*
rɔtrê rɔtrúa – *description of a child's temper tantrum*
hrei hrui – *description of being all cut up with scratches*
'rè 'rò – *description of complete destruction*

12.12 *POETIC FORM*

Poetic form has been explored in Smith (1973c). The principal features of Sedang poetry are as follows.

The principal rhyme pattern is to rhyme the last word of a line with a non-final word in the succeeding line. Adjacent lines have a parallel semantic structure with one or more pairs of near synonyms or functional equivalents such that each of the two lines has the same (poetic) meaning. The basic metre is alternate stressed and unstressed syllables.

Nôu A-Nóang, ô nôu A-Nóang tɔpui rɔbak,
x – x – x – x – x – x

Nôu A-Jak tɔpui lo hen.
x – x – x – x

'A-Noang's mother, A-Noang's mother talks
all the time;
A-Jak's mother talks a lot.'

In the above example, rɔbak and A-Jak rhyme; "x" indicates stressed syllables, "–" indicates unstressed syllables. Noang and Jak are siblings.

13. SENTENCE TYPES

13.0 *INTRODUCTION*

Sentences are the principal component of the next higher syntactic level, the paragraph (not included within the scope of this grammar). Sentences consist of a single (independent) clause with or without dependent clauses (13.1-5), two balanced clauses (13.6), and/or either a vocative (13.7) or an exclamation (13.8). Responses (13.9) occur independent of further clause structure but are dependent upon the preceding discourse.

Chapters 7 through 12 discuss the various elements of clause structure. All clauses described and most of those illustrated above are complete and structurally independent of adjacent clauses. They are therefore complete fillers of the next higher syntactic level as simple sentences.

There are other instances of independent clauses strung together within a common intonation contour but without any further structural interrelationship. Semantically such clauses are closely related, frequently citing successive rapid action. These concatenated clauses are each analysed as simple sentences.

There are clauses, however, which are not thus independent but are structurally dependent upon another clause. This chapter discusses six such complex sentence types (13.1-6) which consist of more than one independent clause. About 6-7% of all clauses in the sample text are elements of complex sentences; or, 2-3% of all sentences are complex sentences.

Most complex sentences have a dependent clause introduced by a conjunctive (Conj) and an independent clause.

Vocatives (13.7) and exclamations (13.8) usually, though not always, occur immediately preceding or following a clause to which they are appended to form a sentence. Occurring isolated, like responses (13.9), they constitute a sentence.

Some peripheral syntactic elements described in the chapters above as being clause level elements may also be sentence level elements, especially among the temporal phrases and final particles. Ellipsis of repeated identical elements (e.g. subjects, objects) within successive clauses becomes a sentence level phenomenon.

13.1 *CONDITIONAL SENTENCE*

A conditional sentence has a dependent clause which states a "condition" and an independent clause which states the consequence. The dependent clause usually, but not always, precedes the independent clause. A conditional (clause) conjunctive (CondConj) precedes the dependent clause. The first two *conditional conjunctives* listed are used most frequently:

tang *'if'*

ching *'if, perchance'*, with explicit implication of improbable condition

chǒu, chu *'if'*

The independent clause is sometimes introduced by the temporal me *'then'* (10.1).

Tang eh mơ'no pin tung vó kô hiã me ngin ja eh tróang hơda. *'If you put us out of the jar, we will show you the escape route.'* (CondConj(T CL w mơ-I Vb, fPt), (Temp, Ben T CL))

Gá tơmiat – tang á khến ôh kô ah á ôh ta cha ka. *'He thought, "If I say no, later on I won't be able to eat (her)."'* (Q CL (CondConj(Q CL (Resp))), (TempP, I CL w T Vb))

Tang chuô tó pôi ta veh ôh. *'If you (my in-law) laugh, do not turn away.'* (CondConj(I CL), (Imp I CL w S Vb, fPt))

Tang eh ôh ta mơdreố ki gá kố gá hơnun pla. *'If you don't return these (things) of his, he will also fight.'* (CondConj(T CL w mơ-S Vb), (I CL w T Vb))

Ching eh chai tung pơlê ah á thế vai pơlê kơdê eh. *'If perchance you return into the village in the future, I'll tell the villagers to kill you.'* (CondConj(S CL, fPt), (C CL w Q Vb(T CL)))

Ching ti me eh lo. *'If perchance (it is) like that you go out.'* (CondConj(Frag:ManP), (I CL w S Vb))

Pá ôh ta kai to tea tang ôh ta ái plong. *'We two can't cross the water if there isn't a canoe.'* ((S CL), CondConj(Ex CL))

Ah phế ka tai ká tung tró tang á ton. *'Later on the wildcat-like animal will eat all the fish in the trap if I am (gone) long.'* ((Temp, T CL, QuanP, LocP), CondConj(Eql CL))

The independent clause may have an embedded dependent clause apart from the conditional clause of this sentence type.

Tang pin tê cheng ôh ta ái vai va xúa rôh nò kố vai va ta xê xo. *'If we (try to) sell gongs there aren't any (who) want (them) because nowadays they want only vehicles.'* (CondConj(T CL), ((Ex CL), CausConj(TempP, T CL, fPt)))

Some conditional sentences do not have a conditional conjunctive but the semantic content and the intonational relationship of the adjacent clauses indicate this sentence type.

Eh ti loi u lôi. *'(If) you don't believe (then) that's all.'* ((I CL w I Vb), (I CL w C Vb))

Eh hvang pơkéang ki me ah chiang tea kan. *'(If) you throw that powder (then) later on (it) will become a large river.'* ((T CL w B Vb), (Temp, Eq3 CL))

Túan gá va ti lai hlo ti me. *'(If) his mind wanted (something) somehow (then he) saw (it) like that.'* ((I CL w T Vb, ManP), (I CL w C Vb, ManP))

Ái rổi pin chai tung cha. *'(If) there are flies (then) we will be sick in body.'* (Ex CL, (I CL w T Vb, LocP))

13.2 *CAUSAL SENTENCE*

The causal sentence has a dependent clause which states a reason or "cause", and an independent clause which states the consequence. The dependent clause usually follows the independent clause, though the order may be reversed. The *causal conjunctives* (CausConj) are:

xúa *'because'*; cf. ContConj xúa *'but'* (13.3)

lá *'because'*

Gá kố páng rơdei klai xúa gá pa xéang véang gá me. *'This one was quite strong because he — the father spirit — helped him.'* ((Eql CL), CausConj(OEmp T CL w C Vb))

Xéang véang gá me xúa vai ôh tu va gá me. *'The spirit helped him because they didn't want him.'* ((T CL w C Vb), CausConj(T CL w C Vb))

Nô kố gá hiáng chiang kro xúa A-Piá xo gá pơkéang me nah. *'Now he had become rich because A-Pia had previously gotten him powder.'* ((TempP, Eq3 CL), CausConj(Ben T CL w C Vb, fPt))

Pa Xôu va lám tung kong hã̃ xúa pa va xo ká. *'Xou's father went into the jungle also because father wanted to get fish.'* ((S CL, fPt), CausConj(I CL w C Vb))

Xúa ti me pa Xôu lám tung kong. *'Because (it was) like that Xou's father went in the jungle.'* (CausConj(Frag:(ManP)), (S CL))

Dôh gá tối, "Chuô da dea lôi nô kố xúa nah á tang vai tối tang pin va ôu drôu pôm pin thế dea lôi hơdrối." *'His son-in-law said, "You (father-in-law) continue to pour (it) out now because once I heard them say if we want to drink potato wine we must pour (it) out first.'* (Q CL(Imp I CL w T Vb, Temp), CausConj(Temp, C CL w Q Vb(C CL w Q Vb(CondConj(T CL), (I CL w T Vb, DesP)))))

13.3 *CONTRASTIVE SENTENCE*

The contrastive sentence has an independent clause stating a situation or event followed by a dependent clause positing a contrary or "contrastive" situation or event. The dependent clause is introduced by a *contrastive conjunctive* (ContConj). There are three contrastive conjunctives:

xúa *'but, except'*; cf. CausConj xúa *'because'* (13.2)

me *'but, except'*; cf. Dem me (7.1), Temp me (10.1), fPt me (10.4), ResConj me (13.5)

tơma *'but, except'*

Gá thế kôm kúan me kia ki me va ka gá me ai. *'He said to wait for the child but that ghost wanted to eat him soon.'* ((C CL w Q Vb(T CL w C Vb)), ContConj(T CL, fPt))

Khến tang pôm rem hài rem hài xúa dreng pin ka ah ôh ta hlo ka pôm. *'(You) say (you) go look for potatoes every day but when we eat later on we don't see (or) eat potatoes.'* ((C CL w Q Vb (T CL), (TempP)x2), ContConj(TempSub(I CL w T Vb, Temp), T CL))

Mơngế trối pin ra xúa gá kia. *'(He is) a person just like us except he's a ghost.'* ((Frag:(Co:(NP), SimP, fPt)), ContConj (Eql CL))

Xo gá hme tung díng lém xúa gá ôh tu va ka ôh. *'(She) got him rice in a beautiful serving dish but he did not want to eat.'* ((Ben T CL w C Vb, LocP), ContConj(I CL w T Vb, fPt))

Préi mot trúam hmốu xúa tea tôu nô kố pa. *'The two entered the hole (in the) rock but (it's) hot water (=DakTo) now, dad.'* ((S CL), ContConj(Frag(Co:(NP)), Temp, Voc))

Nah klá hiáng ka ro vai, tơma ôh ta cha. *'Previously a tiger had killed their cow but (they) didn't catch (it).'* ((Temp, T CL), ContConj(I CL w T Vb))

13.4 *CONCESSIVE SENTENCE*

The concessive sentence has an independent clause stating a situation or event conjoined to a dependent clause positing an exception or "concession" to that which was or will be stated. The dependent clause is introduced by the *concessive conjunctive* (ConcConj) ma lua, lua *'though, although, yet, despite, whether or not'*.

Ma lua mơngế ôh ta rơhỗi, vai tối gá mơngế ôh ta rơhẽa, tung hngei gá hơnun tơma ái túm khu kế ki me. *'Although someone may not be smart and they say he's not capable, in his house there are also customarily all those things (i.e. necessary tools).'* (ConcConj((Eql CL), (C CL w Q Vb(Eql CL:(Co:(Eql CL))))), (LocEmp Ex CL))

13.5 *RESULTANT SENTENCE*

The resultant sentence has an independent clause stating a situation or event conjoined to a dependent clause stating a "resultant" situation or event. The dependent clause is introduced by the *resultant conjunctive* (ResConj) me *'so, so that, thus'*. Cf. Dem me, Temp me, fPt me, ContConj me.

Vai va kơdê gá me gá hnối preố hlối. *'They were about to kill him so he returned immediately.'* ((T CL), ResConj(I CL w S Vb, fPt))

13.6 *FRUSTRATIVE SENTENCE*

The frustrative sentence (this term from Longacre, 1971:20) consists of two grammatically balanced but semantically opposing clauses and indicates an increasing frustration in the event of the second part by prolongation of the event of the first part. Each of the two clauses is introduced by the *frustrative marker* (FrusM) rế. Most common use of this sentence type is with clause fragments (12.9).

Rế ton rế ia. *'The longer (he did it), the less (he had).'* ((FrusM, TempP), (FrusM, QuanP))

Rế hen rế chai. *'The more (doctors she saw), the sicker (she became).'* ((FrusM, QuanP), (FrusM, vAdj))

13.7 *VOCATIVES*

Vocatives (Voc) occur either before or after a clause or independently. When before a clause, vocatives are separated by juncture from the clause and have a separate intonation pattern. When after a clause juncture may be elided and the vocative may occur within the clause intonation pattern.

Vocatives are either personal names (7.1), kinship terms extended to encompass all associates (e.g. 'bok, Bahnar for *'grandfather'*, is used for foreigners and highly respected officials), or a kinship term followed by the personal name.

Ô ja. *'Oh grandmother.'*

A-Piá. *'A-Pia.'*

A-Piá, pơ'lang eh hôu nô kố. *'A-Pia, good-bye now, okay?'* (Voc, T CL, fPt, Temp)

Ja Tế Tôu, eh a hôm hlo Kơxêt Tlua lám tróang kô ai? *'Grandmother Te Tou, have you seen (the fellow) Koxet Tlua going on this path recently?'* (Voc, C CL(S CL), fPt)

Á kơ-ồk kố pa. *'I have a cold here, dad.'* (I CL, LocP, Voc)

13.8 *EXCLAMATIONS*

Exclamations (Excl) usually precede the clause but may occur independently. Exclamations include the following:

a *'ah'*

brei, tơbrei *'hurrah'*, to express glee over an enemy's misfortune

Brei, brei, Téang hiáng hla. *'Hurrah, hurrah, Teang is dead.'* ((Excl)x2, I CL)

e, è – expresses pensiveness

èh – attracts attention, expresses shock or desire to change one's mind; cf. fPt èh question marker

Èh, ngán hôu. *'Hey, look here, okay?'* (Excl, Imp I CL w C Vb, fPt)

Èh, tang ti me eh lám hơdrối neố èh. *'Hey, if (it is) like that you go in front.'* (Excl, CondConj(Frag:(ManP)), (I CL w S Vb, DesP, fPt), fPt)

ei – exclamation of ridicule

hàh, hèh, hêh, hôh – expresses surprise

i, ih *'feminine fright'*

me – expresses resignation to a situation or indicates that an event has been completed

ồ *'okay?'*

ô – attracts attention, often precedes vocative

ô vêh – expresses dismay

ôi, ôih – expresses dismay

têh, teh – surprise, *'what on earth!'*

Têh, kơbố pôe rơpôe kô ai? *'What! Who cut the soapberry?'* (Excl, T CL, fPt)

tet, têt *'surprise, astonishment'*

Tet ti lai kô ah. *'What on earth!'* (Frag:(Excl, ManP, fPt))

13.9 *RESPONSES*

Responses (Resp) are dependent syntactic elements in that they are triggered by specific questions which are understood to be answerable either (1) by a repetition of the clause with substitution of appropriate particles or (2) by a single response word. Response words do not otherwise occur within clause structure but have the sole function of a single word response. (Other single word responses may be formed, of course, by ellipsis of all but the appropriate element of a clause; response words are not the result of ellipsis.) Response words form a small class which includes the following:

eô *'okay'*, affirmative response to imperative

hôm *'yes'*, affirmative response to an a hôm yes-no question

khoh *'permitted, not taboo'*, affirmative response to an a hôm khoh *'is it permitted?'* question

'nhiah, hài 'nhiah *'not yet'*, negative answer to an a hài *'yet?'* question

ôu *'okay'*, affirmative response to a hôu imperative

ô-ôh *'no'*, negative response to an a hôm yes-no question

Any preverb (8.3) or the verbal particles hiáng *'already'* or ta hài (8.4) may form, by ellipsis, single word responses.

BIBLIOGRAPHY

(Vernacular publications are included at the end.)

AYMONIER, Étienne and Antoine CABATON
1906 *Dictionnaire Čam-français.* Paris: Imprimerie Nationale.

BAUDESSON, Henry
1919? *Indo-China and its Primitive People.* Trs by E. Appleby Holt. London: Hutchinson.

BLANSITT, Edward L., Jr, ed.
1967 *Report of the Eighteenth Annual Round Table Meeting on Linguistics and Language Studies.* Washington, D.C.: Georgetown University Press.

BLOOD, Henry F.
1968 *A Reconstruction of Proto Mnong.* Grand Forks: Summer Institute of Linguistics, University of North Dakota.

BREND, Ruth M., ed.
1974 *Advances in Tagmemics.* Amsterdam: North-Holland.

BRENIER, Henri
1948 Notes and Comments on 'The Potential Contributions of the Moi to the Cultural Landscape of Indochina' by George Devereux. *Far Eastern Quarterly* 8:74-6.

CABATON, Antoine
1905 'Dix dialectes indochinois recueillis par Prosper Odend'hal'. *Journal Asiatique* (10e ser.) 5:265-344.

CLIFFORD, Hugh
1926 'The King of the Sedangs'. *Asia* 26/10:854-8, 915-20.

COEDÈS, George

1962 *Les peuples de la péninsule indochinoise: histoire, civilizations.* Paris: Dunod.

1966 The Making of South East Asia. (Trs by H.M. Wright of *Les peuples de la pénsinule indochinoise.*) Berkeley: University of California Press.

COOK, Walter A., S.J.

1969 *Introduction to Tagmemic Analysis.* New York: Holt, Rinehart and Winston.

COOPER, James S.

1973 'An Ethnography of Halăng Rhymes.' In: Thomas and Hoà, eds 1973:33-41.

COOPER, James S. and Nancy COOPER

1966 'Halăng Phonemes'. In: Thomas, Hoà and Blood, eds 1966:87-98.

CUPET, Pierre Paul

1893 'Chez les populations sauvages du sud de l'Annam'. *Le Tour du Monde* 65/14:216ff.

DAM BO

1950 'Les tribus, leurs dialectes et leurs visages'. *France-Asie* 5:49-50, 931-1208.

DEVEREUX, George

1937 'Functioning Units in Ha(rh)ndea(ng) Society.' *Primitive Man* 10/1:1-7.

1938 'Principles of Hä(rhn)de:a(ng) Divination'. *Man* 38/143:125-7.

1947 'The Potential Contributions of the Moi to the Cultural Landscape of Indochina'. *Far Eastern Quarterly* 6/4:390-5.

DYEN, Isidore

1963 *The Lexicostatistical Classification of the Austronesian Languages.* New Haven: Yale University.

ELSON, Benjamin F. and Velma B. PICKETT

1960 *Beginning Morphology-syntax.* Santa Ana, California: Summer Institute of Linguistics.

FAUBLEE, J.

1952 'Langues malayo-polynesiennes'. In: A. Meillet and Marcel Cohen, eds *Les langues du monde* 649-73. Paris: CNRS.

FERLUS, Michel
1974 Review of *A Phonological Reconstruction of Proto-North-Bahnaric* by Kenneth D. Smith. *Asie du Sud-Est et Monde Insulindien* (Mouton) 5/1:183-5.

FINOT, L.
1907 Review of *Die Mon-Khmer-Völker* by Wilhelm Schmidt. *T'oung Pao* (2e ser.) 8:134-7.

GLEASON, Henry Allan, Jr
1955 *Wordbook in Descriptive Linguistics*. New York: Henry Holt.

GRADIN, Dwight
1966 'Consonantal Tone in Jeh Phonemics'. In: Thomas, Hoà and Blood, eds 1966:41-54.

GREGERSON, Kenneth J.
1971 Predicate and Argument in Rengao Grammar. Ph.D. dissertation, University of Washington.

1973 Tongue Root and Register in Mon-Khmer. Paper presented at the First International Conference on Austroasiatic Linguistics, Honolulu.

GREGERSON, Kenneth J. and Kenneth D. SMITH
1973 'The Development of Tɔdrah Register'. In: Thomas and Hoà, eds 1973:143-84.

GREGERSON, Kenneth J., Kenneth D. SMITH and David D. THOMAS
1976 *Austroasiatic Studies*, Part I. Edited by Philip N. Jenner, Laurence C. Thompson and Stanley Starosta. *Oceanic Linguistics* Special Publication No.13 (1976), pp.371-406.

GREGERSON, Kenneth J. and David D. THOMAS, eds
1976 *Mon-Khmer Studies V*. Manila: Summer Institute of Linguistics.

GUDSCHINSKY, Sarah C.
1956 'The ABC's of Lexicostatistics (Glottochronology)'. *Word* 12:175-210. Republished in Dell Hymes, ed. *Language in Culture and Society*, 1964.

1973 *A Manual of Literacy for Preliterate Peoples*. Edited by Ramona Lucht, Jacqueline Firchow and Eunice Loeweke. Ukarumpa, Papua New Guinea: Summer Institute of Linguistics.

GUILLEMINET, Paul
1952 *Coutumier de la tribu Bahnar, des Sedang et des Jarai de la province de Kontum.* Paris: E. de Boccard.

HALE, Austin, ed.
1973 *Clause, Sentence, and Discourse Patterns in Selected Languages of Nepal.* SIL Publications in Linguistics and Related Fields 40. Norman, Oklahoma: Summer Institute of Linguistics.

HALLE, M. and K.N. STEVENS
1969 'On the Feature "Advanced Tongue Root"'. *MIT Quarterly Progress Report* 94:209-15.

HEADLEY, Robert K., Jr
1976 *Austroasiatic Studies*, Part I. Edited by Philip N. Jenner, Laurence C. Thompson and Stanley Starosta. *Oceanic Linguistics* Special Publication No.13 (1976), pp.453-76.

HENDERSON, Eugénie J.A.
1952 'The Main Features of Cambodian Pronunication'. *Bulletin of the School of Oriental Studies* 14/1:149-74.

HICKEY, Gerald C.
1964 'Sedang'. In: Frank M. LeBar, Gerald C. Hickey and John K. Musgrave, eds *Ethnic Groups of Mainland Southeast Asia*, 146-149. New Haven: H.R.A.F.P.

1967 'Some Aspects of Hill Tribe Life in South Vietnam'. In: Peter Kunstadter, ed. *Southeast Asian Tribes, Minorities, and Nations*, vol.2:745-70. Princeton, N.J.: Princeton University Press.

HOFFET, J.-H.
1933 'Les mois de la chaine annamitique entre Tourane et Les Boloven'. *Terre Air Mer* 59/1:1-43.

JACOB, Judith M.
1968 *Introduction to Cambodian.* London: Oxford University Press.

JENNER, Phillip H.
1966 *Khmer Phonemes and Syllables: a Phonemic Analysis of Khmer.* Honolulu: University of Hawaii.

JENNINGS, Wanda
1974 Roteang Astronomy: A Didactic of the Former Culture-folklore. Typescript.

JONES, Robert B.
1970 'Classifier Constructions in Southeast Asia'. *Journal of the American Oriental Society* 90/1:1-12.

KIECKERS, Ernst
1931 *Die Sprachstämme der Erde, mit einer Anzahl grammatischer Skizzen.* Heidelberg: Carl Winter.

LADEFOGED, Peter
1971 *Preliminaries to Linguistic Phonetics.* Chicago: University of Chicago Press.

LEE, Ernest W.
1966 Proto-Chamic Phonological Word and Vocabulary. Ph.D. dissertation, Indiana University.

LONGACRE, Robert E.
1964 *Grammar Discovery Procedures: a Field Manual.* The Hague: Mouton.
1971 'The Relevance of Sentence Structure Analysis to Bible Translation'. *Notes on Translation* (Huntington Beach, California: Wycliffe Bible Translators) 40:16-23.

MAITRE, Henri
1912 'Les populations de l'Indo-Chine'. *Bulletin et Memoires de la Société d'Anthropologie de Paris* (6e sér.) 3:107-15.

MANLEY, Timothy M.
1972 *Outline of Srê Structure. Oceanic Linguistics* Special Publication No.12. Honolulu: University of Hawaii Press.

MANSUY, H.
1929 'Préhistoire et protohistoire'. In: G. Maspero, ed. *Un empire colonial français: l'Indochine*, vol.1:63-80.

MARQUET, Jean
1927 *Un aventurier du XIXe siècle: Marie 1er, roi des Sedang, 1888-1890.* Hue: Editions du Bulletin des Amis du Vieux Hué.

MASPERO, Henri

1929a 'Moeurs et coutumes des populations sauvages'. In: G. Maspero, ed. *Un empire colonial français, l'Indochine*, vol.1:233-55.

1929b 'Langues'. In: G. Maspero, ed. *Un empire colonial français, l'Indochine*, vol.1:63-80.

NCTXH

1960 *Nha công-tác Xã-hội Miền-Thượng* (Bureau of Social Action for the Highland Area): *Tông-Số Các Sắc Dân Thượng* (The total highland population figures). Saigon.

NER, M.

1927 Review of *Un aventurier du XIXe siècle: Marie 1er, roi des Sedang, 1888-1890* by Jean Marquet, and *Marie 1er, roi des Sedang, 1888-1890* by Maurice Soulié. *Bulletin de l'École Française d'Extrême-Orient* 27:308-50.

NNCDT

1959 *Nhom Nghiện Cưu Dân Tộc của Uy-bản Dân Tộc* (Minority people's study group of the Committee of minority peoples): *Các Dân Tộc Thiểu Số Ở Việt-Nam* (Minority peoples of Vietnam). Hanoi: Nhà Xuất Bản Văn Hóa.

PHILLIPS, Richard L.

1962 Voice Register in Mon-Khmer Languages. MS.

1971 Phonological Reconstruction of Proto-Bahnaric. MS.

1973 'Vowel Distribution in Hrê'. In: Thomas and Hoà, eds 1973:63-8.

PIKE, Kenneth L.

1967 *Language in Relation to a Unified Theory of the Structure of Human Behavior*. The Hague: Mouton.

PIKE, Kenneth L. and Evelyn G. PIKE

1977 *Grammatical Analysis*. Huntington Beach, California: Summer Institute of Linguistics.

PINNOW, Heinz-Jürgen

1959 *Versuch einer historischen Lautlehre der Kharia-Sprache*. Wiesbaden: Otto Harrassowitz.

PRZYLUSKI, J.
1924 'Les langues austroasiatiques'. In: A. Meillet et M. Cohen, *Les langues du monde*, 385-403.

RAY, Sidney H.
1907 Review of *Die Mon-Khmer-Völker* by Wilhelm Schmidt. *Man* 7/107:189-92.

REYNAUD, le Docteur
1962 'Étude des phonèmes vietnamiens, par confrontation entre le Vietnamien et quelques dialectes des Hauts-Plateaux du Sud-Vietnam'. *Bulletin de la Société des Études Indo-chinoises* 37:117-253.

SALZNER, Richard
1960 *Sprachenatlas des Indopazifischen Raumes*. Wiesbaden: Otto Harrassowitz.

SCHMIDT, P. Wilhelm
1906 'Die Mon-Khmer-Volker, ein Bindeglied zwischen Volkern Zentralasiens und Austronesiens'. *Archiv fur Anthropologie* NF 5:55-109. Also: Braunschweig: Friedrich Vieweg und Sohn.

1907 'Les peuples Mon-Khmer: trait-d'union entre les peuples de l'Asie Centrale et de l'Austronesie'. (Trs from German) *Bulletin de l'École Française d'Extrême-Orient* 7:213-63.

1926 *Die Sprachenfamilien und Sprachenkreise der Erde*. 2 vols. Heidelberg: Carl Winter.

SEBEOK, Thomas A.
1942 'An Examination of the Austroasiatic Language Family'. *Language* 18:206-17.

SHORTO, Harry L.
1962 *A Dictionary of Modern Spoken Mon*. London: Oxford University Press.

1967 'The Register Distinctions in Mon-Khmer Languages'. *Gesellschafts- und Sprachwissenschaftliche Reihe*, Heft 1/2, 16 Jahrgang 1967, 245-8.

SMITH, Kenneth D.
1967a *Ngữ-vựng Sedang — Sedang Vocabulary*. Saigon: Bộ Giáo-dục (Department of Education). Microfiche edition, 1976:

Huntington Beach, California: Summer Institute of Linguistics.

1967b 'Sedang Dialects'. *Bulletin de la Société des Études Indochinoises* 42:195-255. Revised for M.A. thesis, University of North Dakota (1968).

1967c *Sedang Language Lessons: Bài học tiếng Sedang* (Sedang language lessons). Saigon: Bộ Giáo-dục (Department of Education). Revised, 1976: *'Bái hòk topui rotéang*. Manila: Summer Institute of Linguistics.

1968 'Laryngealization and Delaryngealization in Sedang Phonemics'. *Linguistics* 38:52-69.

1969a 'Sedang Affixation'. In: Thomas, ed. 1969:108-29.

1969b 'Sedang Ethnodialects'. *Anthropological Linguistics* 11/5: 143-7.

1969c 'The Phonology of Sedang Personal Names'. *Anthropological Linguistics* 11/6:187-98.

1972 *A Phonological Reconstruction of Proto-North-Bahnaric*. Language Data: Asian-Pacific Series No.2. Santa Ana, California: Summer Institute of Linguistics. Also published as Language Data Microfiche AP 3.

1973a 'Denasolaryngealization in Sedang Folk-linguistics'. In: Thomas and Hoà, eds 1973:53-62.

1973b 'More on Sedang Ethnodialects'. In: Thomas and Hoà, eds 1973:43-51.

1973c Sedang Song-poetics. Typescript.

1974a 'A Computer Analysis of Vietnam Language Relationships'. *Workpapers* 18:99-113. Summer Institute of Linguistics, University of North Dakota.

1974b Homonyms in Sedang Kinship Terminology. Typescript.

1974c Indic Linguistic Influence in Vietnam. Typescript.

1974d Sociolinguistics and the Bahnar Pronoun System. Typescript.

1974e 'Text vs. Dictionary Letter Frequencies for Primers'. *Workpapers* 18:77-97. Summer Institute of Linguistics, University of North Dakota.

1975 'The Velar Animal Prefix Relic in Vietnam Languages'. *Linguistics of the Tibeto-Burman Area* (University of California at Berkeley) 2:1-18.

1976a 'Sedang Animal Folk Taxonomy'. In: Gregerson and Thomas, eds 1976:179-94.

1976b 'Sedang Pronoun Reference'. In: Gregerson and Thomas, eds 1976:165-78.

1976c 'North Bahnaric Numeral Systems'. *Linguistics* 174 (a special issue on Austroasiatic numeral systems):61-3.

SMITH, Ronald L.

1973 'Ngeq Phonemes'. In: Thomas and Hoà, eds 1973:77-84.

SOULIÉ, Maurice

1927 *Marie 1er, roi des Sedang, 1888-1890.* Paris: Marpon.

THOMAS, David D.

1966 'Mon-Khmer Subgroupings in Vietnam'. In: Norman H. Zide, ed. *Studies in Comparative Austroasiatic Linguistics*, 194-202. The Hague: Mouton.

1971 *Chrau Grammar: a Mon-Khmer Language of Vietnam. Oceanic Linguistics* Special Publication No.7. Honolulu: University of Hawaii Press.

1974 'A Note on "Yuan"'. *Journal of the American Oriental Society* 94:123.

THOMAS, David D., ed.

1964a *Mon-Khmer Studies I.* Linguistic Circle of Saigon Publication No.1. Saigon: Linguistic Circle of Saigon and Summer Institute of Linguistics.

1964b 'A Survey of Austroasiatic and Mon-Khmer Comparative Studies'. In: Thomas, ed. 1964:149-63.

1969 *Mon-Khmer Studies III.* Linguistic Circle of Saigon Publication No.4. Saigon: Linguistic Circle of Saigon and Summer Institute of Linguistics.

THOMAS, David D. and Robert K. HEADLEY, Jr

1970 'More on Mon-Khmer Subgroupings'. *Lingua* 25:398-418.

THOMAS, David D. and Alan HEALEY

1962 'Some Philippine Language Subgroupings: a Lexicostatistical Study'. *Anthropological Linguistics* 4/9:21-33.

THOMAS, David D. and NGUYỄN ĐÌNH-HOÀ, eds
1973 *Mon-Khmer Studies IV.* Carbondale: Center for Vietnamese Studies and Summer Institute of Linguistics.

THOMAS, David D., NGUYỄN ĐÌNH-HOÀ and David D. BLOOD, eds
1966 *Mon-Khmer Studies II.* Linguistic Circle of Saigon Publication No.3. Saigon: Linguistic Circle of Saigon and Summer Institute of Linguistics.

THOMAS, David D. and Marilyn L. SMITH
1967 'Proto Jeh-Halang'. *Zeitschrift für Phonetik* 20:157-75.

THOMAS, Dorothy M.
1967 Phonological Reconstruction of Proto-East-Katuic. M.A. thesis, University of North Dakota.

THOMPSON, Laurence C.
1965 *A Vietnamese Grammar.* Seattle: University of Washington Press.

VOEGELIN, C.F. and F.M. VOEGELIN
1966 'Languages of the World: Indo-Pacific Fascicle Seven'. *Anthropological Linguistics* 8/3.

Vernacular Publications

I. Literacy and educational materials (each item listed here was published in Saigon, Vietnam, by Bộ Giáo-dục (Department of Education); each of these, except only the last item, is available in microfiche edition from the Summer Institute of Linguistics, Huntington Beach, California)

Eh mơhriam tơdróang ối ka lém, Lam môi, 'Na vai hòk tro; Em tập tinh tốt cho các sắc-tộc, Lớp một, Phần học sinh. (First grade student's Ethics text) (1971) 151 pp.

Eh hòk túm khu kế lap luô, Lam môi, 'Na vai hòk tro; Em tim-hiểu khoa-học cho các sắc-tộc, Lớp một, Phần học sinh. (First grade student's Science text) (1971) 183 pp.

Eh mơhriam hòk chu rơtéang, Lam ki póang, Kơxôp 1, 2, 3; Em học vân, Lớp vỡ-lòng, Phần học sinh, Quyển 1, 2, 3. (Primer grade student's reading primer, volumes 1, 2, 3) (1972) 64, 96, 133 pp.

Rak dei cha va kho mo cha, Lam môi, 'Na vai hòk tro; Sách vệ-sinh cho các sắc-tộc, Lớp một, Phần học sinh. (First grade student's Health text) (1972) 127 pp.

Eh mơhriam hòk chu rơtéang 1-20; Em học vân bảng treo 1-20. (Primer wallcharts for lessons 1-20) (1972) 10 sheets.

Eh mơhriam hòk chu rơtéang, Lam ki póang, 'Na ki 'bok thái; Em học vân tiếng Sedang, Lớp vỡ-lòng, Phần chỉ nam. (Primer grade teacher's guide for reading primers) (1972) 309 pp.

Va hnê tơdróang kơxỗ: 1, 2; Lam ki póang, 'Na vai 'Bok thái; Em học toán cho các sắc-tộc, Lớp vỡ-lòng, Phần chỉ nam. (Primer grade Arithmetics teacher's guide) (1972) 104 pp.

Va hnê tơdróang krúa, tơdróang túm khu kế lap luô, 'Báng tơdróang ối ka lém, Lam ki póang, 'Na vai 'bok thái; Môn học bàng bảng treo vệ-sinh, khoa-học và đức-dục cho các sắc-tộc, Lớp vỡ-lòng, Phần chỉ nam. (Primer grade teacher's guide for wallcharts for Health, Science, Ethics) (1972) 159 pp.

Rơtéang 1-8. (Primers 1-8) Summer Institute of Linguistics (1966) 8 booklets.

II. Scripture materials

Hiáng hlo kế ki ái hiá: tưởng mất mà còn. (Luke 15 (Sedang and Vietnamese)) Thánh-Kinh Hội (Bible Society) (1967) 19 pp.
Revision (Sedang only) (1970) 8 pp.

Hlá mơ-éa tơdróang Jêsu dế gá ối a tơnei. (Bible stories: Life of Christ) (1967) 61 pp., mimeo.
Revision (1974) 93 pp.

Tơdróang Pa Xéang 'nhie róng tơnei xúa tea rơnang; Sáng-thế Ký 6:5-9:19 theo Kinh Thánh. (Noah story) Manila. 23 pp.

Hlá mơ-éa tơdróang neố lém Yêsu Kritô ki 'Bok Mar-kô cheh, Tal 1-11, 'báng Tơdróang Yêsu hlá me ối reh neố; Mác 1-11 theo Kinh-Thánh và truyện-tích Chúa Giê-xu chết mà sống lại. (Mark, chapters 1-11 with Jesus' resurrection) 59 pp.

GENERAL INDEX

INDEX OF SEDANG WORDS

(This index includes only those words discussed in the text apart from examples.)

Smith, K.D. *Sedang grammar: Phonological and syntactic structure.*
B-50, xx + 210 pages. Pacific Linguistics, The Australian National University, 1979. DOI:*10.15144/PL-B50.1*